The Journal of The SOUTH CAROLINA *Medical Association*

VOLUME LII FEBRUARY, 1956 NUMBER 2

ANTIBIOTICS

CHLORPROMAZINE

PYRIDOSTIGMINE

SHEEHAN'S SYNDROME

ELECTROCARDIOGRAM

Tonsillitis, pharyngitis quickly yield to

ILOTYCIN

(Erythromycin, Lilly)

Temperature rapidly returns to normal; swelling and soreness readily subside. Notably *safe* and well tolerated.

dosage: Usually, 250 mg. q. 6 h. Children, 5 mg. per pound of body weight q. 6 h.

Lilly

EE2200

can your diuretic
"upgrade" your
heart patients?

know your diuretic

fewer restrictions of activity are the benefit of prolonged use of those diuretics effective over the entire range of cardiac failure. The organomercurials—parenteral and oral—improve the classification and prognosis of your decompensated patients. Diuretics of value only in milder grades of failure, or which must be given intermittently because of refractoriness or side effects, are incapable of "upgrading" the cardiac patient.

TABLET
NEOHYDRIN®
BRAND OF CHLORMERODRIN

(18.3 MG. OF 3-CHLOROMERCURI-2 -METHOXY-PROPYLUREA IN EACH TABLET)

for "...a new picture of the patient in congestive heart failure."*
replaces injections in 80% to 90% of patients
*Leff, W., and Nussbaum, H. E.: J. M. Soc. New Jersey 50:149, 1953.

a standard for initial control of severe failure

MERCUHYDRIN® SODIUM
BRAND OF MERALLURIDE INJECTION

Leadership in diuretic research
Lakeside LABORATORIES, INC., MILWAUKEE 1, WISCONSIN

88955

FEBRUARY 1956 — VOL. LII NO. 2

The Journal of The
SOUTH CAROLINA
Medical Association

EDITOR

JOSEPH I. WARING
82 Rutledge Avenue
Charleston, S. C.

EDITORIAL BOARD

J. P. CAIN
J. D. GUESS
C. J. MILLING
H. R. PRATT-THOMAS
VINCE MOSELEY
BEN MILLER
W. H. PRIOLEAU
J. W. JERVEY
G. D. JOHNSON
R. M. POLLITZER
HUGH SMITH
WALTER MEAD

BUSINESS MANAGER

MRS. C. G. WATSON
105 W. Cheves Street
Florence, S. C.

SOUTH CAROLINA MEDICAL ASSOCIATION OFFICERS 1955-1956

O. B. MAYER, President
W. WYMAN KING, Vice President
W. H. PRIOLEAU, President-Elect
ROBERT WILSON, Secretary
HOWARD STOKES, Treasurer

COUNCILORS

BACHMAN SMITH, 1st District
A. F. BURNSIDE, 2nd District
H. B. MORGAN, 3rd District
C. N. WYATT, 4th District
R. L. CRAWFORD, 5th District
J. P. CAIN, 6th District
A. C. BOZARD, 7th District
J. H. GRESSETTE, 8th District
D. L. SMITH, 9th District

DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

Delegates
WILLIAM WESTON, JR.
GEORGE DEAN JOHNSON
Alternates
ROBERT WILSON
C. N. WYATT

EXECUTIVE SECRETARY

MR. M. L. MEADORS
120 W. Cheves Street
Florence, S. C.

THE JOURNAL OF THE SOUTH CAROLINA MEDICAL ASSOCIATION—Published monthly by The South Carolina Medical Association, 105 West Cheves Street, Florence, South Carolina. Subscription Price: $3.00 a Year. Entered as second-class matter February 9, 1916, at the post office at Greenville, South Carolina, under Act of March 3, 1879. Accepted for mailing at special rate of postage provided for in Sec. 1103 Act of October 3, 1917, authorized Aug. 2, 1918.

CONTENTS

ORIGINAL ARTICLES

Use and Abuse of Antibiotics — A Panel Discussion 33

Agranulocytosis Due to Chlorpromazine—Dr. Charles R. Holmes and Dr. Halsted M. Stone 42

Pyridostigmine (Mestinon) in Myasthenia Gravis—Dr. Richard S. Pollitzer 46

Postpartum Pituitary Infarction (Sheehan's Syndrome)—Dr. C. T. Prevost 48

Electrocardiogram of The Month—Dr. Dale Groom 53

EDITORIALS

VA Deaf To Hoover Commission 55

Chiropody 55

Reading Improvement Programs 57

Blue Cross — Blue Shield 60

THE ASSOCIATION

Report of Delegate to A. M. A. June 1955 57

Report on Clinical Meeting of American Medical Association Boston, Massachusetts 59

Roper Hospital and The Medical College Hospital 61

FEATURES

President's Page 63

The South Carolina Academy of General Practice 64

Correspondence 64

News 67

Announcements 69

Deaths 71

Book Reviews 72

Scissorisms 73

Woman's Auxiliary 76

Contributions of Original Articles

Length of Article—Ordinarily articles should not exceed 3,000 words (approximately 3 printed pages). Under exceptional circumstances only will articles of over 4,000 words be published.

Manuscripts—Manuscripts should be typewritten, double spaced, and the original and a carbon copy submitted.

Illustrations—Ordinarily publication of 2 or 3 illustrations accompanying an article will be paid for by THE JOURNAL. Any number beyond this will have to be paid for by the author.

References—Should conform to the following order: name of author, title of article, name of periodical, with volume, page, month, day of the month if weekly, and year—i.e.: Lee, G. S.: The heart rhythm following therapy with digitalis, Arch. Int. Med., 44:554, Dec. 1942. They should be listed in alphabetical order and numbered in sequence.

Reprints—Reprints must be paid for by the author at established standard rates.

for a greater margin of security in corticosteroid therapy

- minimizes sodium retention edema
- dietary regulation seldom necessary

in rheumatoid arthritis: better relief of pain, swelling, tenderness; diminishes joint stiffness

intractable asthma: better relief of bronchospasm, dyspnea, cough; increases vital capacity

collagen diseases and allergies: hormone benefits with decreased electrolyte side effects

METICORTEN is available in the following forms:
1 mg., 2.5 mg. and 5 mg. tablets
2.5 mg. and 5 mg. capsules

*T.M.

MC-J-66-1255

The Journal
of the
South Carolina Medical Association

VOLUME LII February, 1956 NUMBER 2

USE AND ABUSE OF ANTIBIOTICS

A PANEL DISCUSSION

Dr. Walton: There are many vexing problems in this topic. I think that certainly a good part of it is due to the extreme multiplicity of items which we call antibiotics. In the sulfonamide field, there has been a period of relative quiescence. Of course, there are many problems in that area too, but since the introduction of sulfadiazine about fourteen or fifteen years ago, we have had only modest changes among the newer sulfonamides. I don't know of anyone who thinks that any of the newer antibiotics are much more important than the original penicillin, but we certainly have need for the different varieties which have been coming from all diverse sources. Besides the fact that we have a good many antibiotics, we also have other complicating features such as the fact that we do depend on our drug companies to manufacture these. They are in business and one of the commercial features which every sales department recognizes is that if they can get our attention focused on one particular name they have secured an important commercial advantage. Accordingly, we have a great many more names in this field than we have drugs, and we have a lot of drugs. Now the panel members, in my preliminary discussion with them, showed that they confine their interest to the few important antibiotics, and also in discussing it with them, we had agreed that we would use the names with which people were most familiar. Now you know the situation with proprietary drugs. You have a generic name, sometimes called a monograph name, and eventually over a period of decades, that might become better known than others, but there are also better known proprietary names which we shall use so everyone interested will know what we are talking about. Now the plan of the panel is to have a complete discussion on the topic in which each member is interested and after the three have summarized their topics, the floor will be open for questions. First we will hear from Dr. Parker. He intends to take up a subject of considerable interest, that is the development of staphylococcus strains which are resistant to penicillin and even to other antibiotics.

Dr. Parker: Today, many hemolytic staphylococcal infections are part of the overall problem of superimposed infection coincident to antibiotic therapy. One of the earliest reports on the occurrence of this phenomenon was made by Appelbaum about 1945. He reported several patients with pneumococcal pneumonia who initially responded satisfactorily to penicillin therapy but who subsequently had fever, cough and leukocytosis. At that point, sputum culture showed a predominance of gram-negative organisms. After streptomycin was added to the antibiotic therapy, the patients became asymptomatic and recovered uneventfully.

We first became concerned with superimposed infections in about 1950 when one of our patients with pneumococcal meningitis and another with pneumococcal pneumonia, both treated with chloramphenicol with initial satisfactory responses, subsequently developed overwhelming hemolytic staphylococcus aureus infections and died.

In 1950, Finland reported another example of superimposed infection secondary to antibiotic treatment. In a series of 91 patients who

---

Presented at the Annual Meeting of the South Carolina Medical Association, May 12, 1955, at Charleston, S. C., by Dr. R. P. Walton, Charleston, (Moderator), Dr. Robert T. Parker, Baltimore, Dr. William R. Sandusky, Charlottesville, Dr. Alexander Schaffer, Baltimore.

had pneumococcal pneumonia and were treated with oxytetracycline, there were five patients who developed superimposed hemolytic staphylococcal infections and died.

The cause of this type of infections is not too difficult to understand when we recall that penicillin and the newer tetracycline group of drugs have the ability to wipe out practically all of the gram-positive organisms which are normal inhabitants of the respiratory passages. This then leaves open the field of battle, one might say, to the resistant staphylococci and gram-negative organisms. More and more investigators have noticed this type of superimposed infection and have become aware of the seriousness of the situation. With the development of newer drugs, we find resistance to those as well as to the older ones such as penicillin. When penicillin first became available, a few strains of hemolytic staphylococci which were isolated showed resistance. This resistance has been shown to be related to the manufacture of penicillinase by the organism. As time has gone on, it has been noted that the incidence of penicillin resistant strains has gradually increased, and this experience has been true throughout the country. For example, in one hospital in 1946, only 12 per cent of the strains of hemolytic staphylococcus aureus were penicillin resistant. Within three years time, this had risen to 60 per cent. With the introduction of the newer broad spectrum drugs, a similar pattern of resistance has developed. For example, at the Mayo Clinic in about 1949, all of the strains of hemolytic staphylococci which were isolated were sensitive to chlortetracycline and oxytetracycline. Within three years time, 45 per cent of the isolated strains were resistant to both of those antibiotics. About a year ago, we encountered an example of this type of superimposed infection, secondary to the use of tetracycline.

We were conducting a controlled study comparing the use of chlortetracycline and tetracycline in the treatment of pneumococcal lobar pneumonia. There were 24 patients in each group. The drugs were administered in a blind fashion. The most serious complication encountered occurred when a 53 year old colored male was admitted with a typical history of pneumococcal lobar pneumonia. His blood culture was positive (type 3 pneumococci); his white blood cell count was 27,500. He was started on therapy and made a very satisfactory response. However, about the twelfth day of disease, he began to have fever. On the thirteenth day, he began to have severe, profuse, greenish-watery diarrhea, averaging approximately 14 stools in 12 hours. Likewise, the onset of nausea and vomiting occurred at about that time. Being alerted to this type of complication from antibiotic therapy, we suggested immediately that a smear of the fecal material be made; a gram stain smear showed the presence of myriads of staphylococci. Without awaiting the results of a stool culture (incidentally this showed a heavy growth of hemolytic staphylococci), tetracycline treatment was discontinued, and the patient was given erythromycin intravenously and, subsequently, orally. As you can see, he responded satisfactorily.

Continuing from that point, in the past six months we have been plagued with a large number of hemolytic staphylococcus aureus infections. This first appeared in the obstetrical service with subsequent cases in the pediatric service, and more recently, in the surgical service. Within the past two months, I have been aware of three patients who have had hemolytic staphylococcus aureus infections secondary to neurosurgical procedures. In one instance, the patient developed an acute endocarditis and died. The second patient also died. The third individual has recovered.

The most disconcerting phase of this problem is the antibiotic resistance pattern of these staphlococci. The strains we have isolated are resistant to all of the antibiotics with the exception of chloramphenicol and erythromycin. In other institutions, the pattern has followed a somewhat different course. However, most of them have reported that the staphylococci are sensitive to those two antibiotics, probably for two reasons. First, concerning erythromycin, it is the last to be added to our armamentarium. Secondly, concerning chloramphenicol, the previous widespread usage was rather drastically cut coincident to the alarm over blood dyscrasias. For these reasons, this

variety of organism remains sensitive to those two antibiotics.

The problem, of course, is tied up also with the question of cross-infections in hospitals. As you can understand, hospital personnel are frequently harboring this organism (staphylococci) in their noses and throats. An example of the importance of this is reported by the studies of Dowling and Leper in Chicago. They have found, and others have also found, that patients coming into a hospital environment will begin to have staphylococci in their throats and nasal passages. In Chicago, prior to the introduction of erythromycin all of the strains of staphylococcus aureus isolated from such patients were sensitive to erythromycin. Within one month after introduction of the drug, 40 per cent of the staphylococci became resistant to erythromycin and within four months, 60 per cent became resistant to erythromycin. Dowling and Leper followed the patients for periods up to 17 months after discharge from the hospital. At that time, 20 per cent of the strains of hemolytic staphylococcus aureus isolated were still resistant to erythromycin.

We have then a very serious problem, the problem of superimposed infections.

Dr. Walton: Thank you, Dr. Parker. Next, Dr. Schaffer will discuss some of the prolonged continued uses of antibiotics in such conditions as prophylaxis or rheumatic fever.

Dr. Schaffer: I would like to preface my remarks by saying that in panel discussions headed "The Use and Abuse of Antibiotics" what very frequently happens is that the discussion degenerates into something which should be entitled "The Abuse of the Audience." These are the individuals who are supposed to overuse the drugs to such an extent that they are being abused. I, of course, couldn't possibly turn this discussion into anything of that nature because I too am a practicing pediatrician and anything which I said along those lines would be applicable to me as well.

In the use of antibiotics, there is at the moment, very little disagreement about their use in serious infections in childhood. Nearly everyone is agreed not only that antibiotic treatment must be used, but which antibiotic should be used in each individual type of infection. This is not true invariably by any means, but for most of the major infections we are in thorough harmony. There is minor difference of opinion between those who think that pneumococcal meningitis ought to be treated with massive doses of penicillin alone and those who think they get equally good results with, let us say, aureomycin or terramycin. It is pretty generally agreed that influenzal meningitis ought to be treated with chloroamphenicol, but there are still those who feel that even in this infection just about as good results can be achieved with aureomycin, terramycin, or achromycin. The consensus would probably be that chloroamphenicol is the drug of choice for influenzal meningitis. In tuberculosis there are differences of opinion as to what drug or drugs should be used with streptomycin. Our experience has not been prolonged enough for us to come up with an absolutely assured answer that streptomycin should be used with para-amino-salicylic-acid, or isoniazid, or with both of those in combination with the streptomycin, but it is certain that streptomycin is the basic drug of choice for tuberculosis. With the hemolytic streptococcus this is a problem of somewhat greater numerical importance. In addition the consequences of streptococcus infection are rarely, but often enough, serious, in the form of acute hemorrhagic nephritis or rheumatic fever. The question of what one does at the onset of streptococcic infection will therefore become more important than what one does at the onset of a pneumococcic infection, or in general of an infection with H. influenza. Some of these also may involve the lungs or the meninges, but in general complications with these organisms are neither so frequent nor so serious as are those following streptococcic infections.

Under the title of "The Abuse of Antibiotics" what is almost invariably stressed is its abuse with respect to over-usage, and I agree there is a good deal of over-use of antibiotics. One ought to make great effort to discriminate between those infections which probably will be helped considerably by antibiotics and those which won't, or, even better, to discriminate

between those infections which are going to get well without antibiotics and those infections which are not going to get well without antibiotics. I become somewhat annoyed when I find that almost all of the children I see in consultation with obvious viral gastroenteritis, "intestinal flu", or whatever you want to call it, have been treated with sulfasuxidine and chloroamphenicol and oral streptomycin and what have you, when it should be perfectly obvious by now that these viral infections are not at all influenced by antibiotics. I don't mean to say that no viral infections are, but these viral infections are not. Similarly, the upper respiratory infections—one must make a determined effort to differentiate between the upper respiratory infections which are due to streptococci and those which are not. It is true that careful studies comparing the guesses of good clinicians with the laboratory results have shown that the percentage of error is extraordinarily high. Nevertheless, if there is exudate on the tonsils, if there is exudate on the pharynx, if there is cervical node enlargement and if the throat is sore one can be highly suspicious of streptococcus, and then one must use the appropriate antibiotic. There is still the feeling that penicillin is the drug of choice over the broad spectrum antibiotics in streptococcus infection but if one reads the literature carefully, one can't find too much to back up this rather vague feeling. Perhaps, with broad spectrum antibiotics, positive cultures persist in the throat a little bit longer than they do with parenteral or with high dosage oral penicillin.

It has taken me a long time to get around to the subject which Dr. Walton wanted me to talk about, but there were some things on my mind that I had to say first. I think that one of the abuses which we don't talk enough about in panel discussions of "The Uses and Abuses of Antibiotics" is the under-usage of antibiotics. We are appalled by the notion that there are some 372 tons of penicillin manufactured in the United States per year now, practically all of which I presume must be used, or the pharmacological houses wouldn't make that much. We are appalled by the figure that was quoted at the antibiotic symposium this year by the Food and Drug Administrator that 40% of all of our prescriptions are now for antibiotics. We probably should be appalled.

Nevertheless, there are certain conditions for which antibiotics haven't been used enough. One of these is for the prophylaxis of rheumatic fever. For a number of years we have been preventing, or attempting to prevent recurrences of rheumatic fever. (I should have said first that one should attempt to prevent the original attack of rheumatic fever by the quick use of antibiotics, preferably penicillin, at the first sign of what one thinks is a streptococcal upper respiratory infection.) After rheumatic fever has developed the problem of prophylaxis or prevention of recurrence comes up, and we should by now be in very general agreement that prophylactic treatment by an anti-microbial agent should be carried on for many many years. For a number of years the anti-microbial agent commonly used was sulfadiazine, and the results gotten in the prevention of rheumatic fever were very good indeed. Nevertheless, the widespread use of sulfonamides for the prevention of recurrence of rheumatic fever never gained complete acceptance, and this is because, I think, doctors always had in the back of their mind the fact that sulfonamides are toxic drugs. When used over long periods of time they may cause, not only rashes, fever and other allergic phenomena, but more particularly leukopenia, and if their use is persisted in they may produce true agranulocytosis. For this reason efforts have been made to prevent recurrence of rheumatic fever by antibiotics which do not have these toxic effects. There have been a number of studies made with the use of penicillin by mouth, chiefly the repository form of penicillin, Bicillin. One of the best documented studies of this kind was made by my associate Dr. Milton Markowitz. He reported at the last antibiotic symposium in Washington just a few months ago, a comparison between a comparable number of cases treated with Bicillin, 200,000 units a day, and with sulfadiazine one-half gram a day for the young children and a gram daily for the older children. In general the results with penicillin

were as good if not a trifle better than the results with sulfadiazine. Recurrences under penicillin were exactly the same as recurrences with sulfadiazine, and they were very few. The toxic effects of penicillin were fewer than with sulfadiazine, although there were very few with sulfadiazine too. I think that one can say with complete certainty that the use of 200,000 (although Chicago and Boston groups prefer 400,000) units of penicillin a day over many, many years is advisable, indeed is mandatory in a child on whom the diagnosis of rheumatic fever has been made.

In addition to this, antibiotics have not been used sufficiently in situations about which Dr. Wright talked this morning. I refer to those children who are subject to oft repeated upper respiratory infection, with or without asthma. If they have asthma this is more reason for them to receive prophylactic antibiotics of some kind, rather antimicrobiotics, if I may use that word, if they do not have asthma, but are children who every week or ten days or two weeks get a severe upper respiratory infection, with fever and cough, many with bronchitis, some with pneumonia, some with otitis, and they are missing half of their school time, it is perfectly legitimate, and very wise to treat these children with prophylactic doses of one of the anti-microbial agents. I say antimicrobial because sulfadiazine is just about as good in the prevention of upper respiratory infection of this nature as are the broad spectrum antibiotics and penicillin. Perhaps the broad spectrum antibiotics are a wee bit better although I haven't enough controls in my own practice to be perfectly sure of that. I wouldn't hesitate to use one or the other. In cystic fibrosis it is essential for the child's survival that he be kept on good-sized prophylactic dosage of a broad spectrum antibiotic. Whether it's necessary to change from one to another because of the fear of the development sensitivity or because of possible development of resistant strains in the respiratory tract is a matter which I have not thoroughly satisfied myself about. I can only say that my oldest cystic fibrosis, now nine years old, was diagnosed at three months of age. He hasn't a thing in his lungs, he has never had any respiratory trouble, and he has never been on anything except aureomycin. Bronchiectasis, leukemia and nephrosis should all be handled the same way. Any child who is under protracted cortisone therapy must be given equally protracted antibiotic prophylaxis.

Dr. Walton: Dr. Schaffer, I wonder if you would like to add something to that with regard to pediatrics and possibly bring up another point which we discussed—the matter of prophylaxis of neonatal pneumonia.

Dr. Schaffer: With respect to the long term treatment of rheumatic fever, I want to stress a point which I failed to make in the previous discussion. This is that contrary to our original impression, one is not permitted to stop antibiotic therapy during the summer months because there are too many recurrences of rheumatic fever in the temperate zone in which we live during the summer as well as during the winter. Prophylaxis of rheumatic fever probably should be kept up until the child has passed adolescence. Prophylaxis of the upper respiratory infection such as Dr. Wright mentioned this morning, with or without asthma, can be carried out for one winter and then one can see what the next fall brings forth. If the child again begins to have repeated upper respiratory infection with or without the lower respiratory components, then one had better decide to repeat it for another winter, and the following fall the same. Usually, it seems to me I've never had to do it more than two winters. Dr. Wright, will you comment on that.

Dr. Wright: I agree completely with everything you have said.

Dr. Schaffer: That is very unusual and gratifying.

For the past few years I have been very interested in the question of neonatal pneumonia, especially that pneumonia which has been acquired in utero, intra-uterine or congenital pneumonia. In all the tables of mortality published since about 1940, pneumonia accounts for from 5% to 10% of all neonatal deaths. In addition to this, pneumonia is the cause of death of many fetuses in utero, the only pathological finding in a stillbirth not uncommonly being intra-uterine

pneumonia. It seems to me that this is a field that we have not attacked with our usual gusto and that we are allowing a great many salvageable babies to die. How many, I am not yet quite sure, but I am perfectly sure that we can find out. In the first place, most of the babies who die of intra-uterine pneumonia, not all to be sure, but roughly half, have acquired this pneumonia because the membranes have ruptured too soon. I think that a six hour membrane rupture time is about normal and that anything over six hours must be called prolonged. There are those who will not agree with me and who contend that 12 hours or even 24 hours is not abnormal. I will stick to my guns without going into detail that six hours is the upper limit of normal. The longer the membranes have been ruptured the more likely is contamination to be present. Since the fetus makes respiratory movements in utero, and I say this as a fact and think I can substantiate it, he breathes contaminated amniotic fluid into his lungs and the result may be a dead baby or one born with intra-uterine pneumonia who dies within a few days. The only point I want to make is that in this condition the obstetrician must begin treatment of the mother before the baby is born. Any mother who ruptures her membranes more than six hours before the obstetrician sees her, should be given the benefit of heavy antibiotic treatment. In addition, the pediatrician who acquires such a baby is under the necessity of beginning treatment with a broad spectrum antibiotic, not penicillin alone, or penicillin and streptomycin, but with a broad spectrum antibiotic immediately after the baby is born.

Dr. Walton: Thank you Dr. Schaffer. Dr. Sandusky will now please summarize a general review of the use of antibiotics in surgery.

Dr. Sandusky: It is a truism to say that the anti-microbial agents have had a profound effect of the practice of surgery. An outstanding example is the marked reduction in surgical infections since the introduction of these drugs. Dr. Walton has asked me to present a panorama of the use of anti-microbial agents in surgery and I have chosen to do this by showing several lantern slides which illustrate in outline form the scope of the problem. The outline includes some abuses as well as the uses of these very valuable agents and, in addition, points out some of the difficulties that we encounter when employing them in surgery.

One can divide the surgical usage of these agents into the prophylactic and therapeutic categories. The first table (lantern slide) illustrates some of the prophylactic purposes which are served by the anti-microbial agents:

1. Contaminated accidental wounds.
2. Operative wounds in or near established infection.
3. Emergency operations in presence of unrelated infections.
4. Preparation for intestinal operations.
5. Patients with indwelling catheters.
6. Operations or injuries of oral and related cavities.
7. Operations on deranged urinary tract.
8. Operations on patients with pre-existing valvular heart disease.

As we go along, I will make brief comments about various items on this list. The first of these is the use of the agents in the contaminated accidental wounds. When one is sure that debridement has been thorough and has been accomplished soon after the injury has taken place, there does not seem to me to be any valid indication for routine employment of anti-microbial agents. Their use should be reserved for those cases in which debridement has been delayed or has been inadequate. When one is operating in areas of or near established infection, unquestionably the use of these agents diminishes complications which are due to microorganisms and these agents should be employed regularly. The same is true when one has to perform an emergency operation in the presence of unrelated infections; for example, an appendectomy in a child who has acute tonsillitis. There is no question but that these agents should be used in those cases. One of the most important advances in operative surgery has been the preparation of patients for intestinal tract operations. The antibacterial drugs have contributed immeasurably, but one must not forget that they should always be used in

conjunction with adequate mechanical cleansing of the intestinal tract. A number of agents have been employed; it would require a good deal of time to discuss each one of them. We use neomycin and bacitracin and feel that this is a very effective combination. Neomycin is extraordinarily effective against the coliform organisms, but it is not particularly effective against the staphlococci nor the clostridia and for that reason bacitracin is combined with it. It goes without saying that patients who have indwelling catheters require prophylaxis, as do those who have been subjected to operation or who have received injuries in oral or related cavities. Patients who are operated upon in the presence of obstruction or abnormalities of the urinary tract obviously need antibacterial agents. Those who have preexisting valvular heart disease and who require operation, for example, a dental extraction, should receive drugs preoperatively. It would seem that very few are excluded from the prophylactic use of these drugs, but there are many surgical procedures performed electively under aseptic conditions. These do not require drug prophylaxis. It is an over-use, in other words, an abuse of these agents to employ them routinely in all patients who face surgical operations.

The next consideration is the therapeutic use of these agents. Basically, there are two classes of patients. One includes those in whom the principal reliance is on drug therapy for the control of the infection. The surgical procedure is secondary and if it is done at all it is directed at the residual elements of the infection. In the other class, the operation is primary; drugs are merely helpful adjuncts.

The following table breaks down these two categories a little more specifically.

I. Unlocalized early infection (circulation intact)
   1. Not closed space (no pressure)
      (a) Cellulitis
      (b) Lymphangitis and lymphadenitis
      (c) Serous cavity infection
   2. Closed space (pressure)
      (a) Tendon sheath infection
      (b) Fascial space infection
      (c) Bone marrow infection
      (d) Hollow viscera infection

II. Localized early infection (circulation intact or diminished)
   (a) Abscess

III. Late infection (circulation diminished)
   (a) Cavities, ulcers, sinuses or fistulae with dense avascular barriers.

When the infection is not in a closed space, when there is no pressure, the infection responds particularly well to the use of drug alone. Cellulitis, lymphangitis, serous cavity infection are examples of this classification. On the other hand, when the infection is in a closed space, and when pressure is either present or threatened, drugs alone must never be employed. One occasionally sees the consequences of delaying surgical intervention in such patients as these. Examples of these infections are tendon sheath, fascial space, bone marrow, and hollow viscera infections. It goes without saying that abscess requires operation as a primary mode of treatment. In infections in which the circulation is diminished or in which there are dense fibrous walls as in cavities or ulcers, operation must be combined with drug therapy.

The following table shows some of the abuses of anti-microbial therapy in surgery:

1. Indiscriminate and empirical use.
2. Ineffective dosage.
3. Improper route of administration.
4. Inadequate laboratory control.

The final slide presents some of the problems which we encounter when using antimicrobial therapy in surgery.

1. Sensitivity and toxic reactions in patient.
2. Resistant organisms.
3. Superinfection.
4. Lowers standards of aseptic technic.
5. Masking of clinical signs and symptoms.

I would like particularly to call your attention to the fact that blind reliance on drug therapy sometimes causes us to be careless in the standards of our aseptic technic and we sometimes lean more heavily on the drugs than on some of the time-honored aseptic principles. One occasionally sees examples of the masking of clinical signs and symptoms due to the use

of these drugs. The harmful effects of such masking is illustrated in connection with possible infection in the peritoneal cavity. In such instances the use of antibacterial agents prior to accurate diagnosis is quite similar to the employment of morphine in the patient who has possible intra-abdominal disease prior to the time when he can be completely evaluated.

Question: I should like to ask Dr. Sandusky if he thinks appendicitis can be cured with antibiotics.

Dr. Sandusky: I can answer that very shortly by saying no. However, once the disease escapes the appendix and becomes peritonitis or intra-abdominal abscess, the antibacterial drugs have a very definite place; if I had the time and the figures before me I could show you a marked drop in the mortality rate in our own hospital. Dr. John Hawk, now of Charleston, analyzed our cases a few years ago and showed a very decided reduction in mortality in peritoneal contamination after the introduction of penicillin and streptomycin.

Question: I have a great many patients who have dental extractions. These extractions seem to hurt a great many of our people more than appendectomy. What is the panel's reaction to some prophylactic drug before dental extractions.

Dr. Sandusky: If the extraction takes place in a mouth which is the site of oral sepsis, some form of prophylaxis is indicated. If the patient has, for example, valvular heart disease or some cardiac defect, I think that prophylactic therapy is definitely indicated, but it would seem superfluous to give every patient who is having dental extractions routine drugs.

Dr. Walton: Thank you Dr. Sandusky. The floor will now be open for a period of questions and answers.

Question: I should like to hear a discussion on the synergistic effects of antibiotics and the antagonistic effects.

Dr. Parker: I think the concern over synergism and antagonism between antibiotic combinations has been overemphasized. Jawetz, in California, performed the initial studies on this problem. Using experimentally infected mice treated with combinations of various antibiotics, he outlined synergistic and antagonistic combinations. Speaking from the clinical standpoint, there is little evidence to substantiate the fact that antagonism exists between antibiotics given in combination. There is, to my knowledge, only one clinical study which in any way points toward antagonism. Dowling and collaborators treated two groups of patients who had pneumococcal meningitis. One group received penicillin alone, one million units every two hours, and the second group received the same dosage of penicillin and, in addition, large doses of chlortetracycline. The group who received both drugs had a mortality rate approximately three times that of the group who received penicillin alone. For all intents and purposes, the severity of illness was the same in both groups. Kirby attempted to confirm this work by a similarly controlled study of pneumococcal pneumonia and could find no difference between the group who received penicillin alone and the group who received penicillin and chlortetracycline.

Likewise, there are few instances in which combinations of antibiotics have been demonstrated to have a definite synergistic effect. There is no question about the efficacy of combining streptomycin with penicillin in the treatment of enterococcal infections such as subacute bacterial endocarditis. Here, the organism is resistant to both antibiotics. Yet, when a combination is given, a bactericidal effect can be demonstrated, and the mortality rate is definitely lower. Some hemolytic staphylococcal infections constitute another clearcut indication for combinations of antibiotics. Infections with certain strains of these microorganisms are only controlled by the use of penicillin, streptomycin and the newer broad-spectrum antibiotics in combination.

Aside from these examples, I don't know of any clinical evidence which substantiates the belief that these drugs should not be given in combination, or which implies that certain combinations of them are synergistic.

Dr. Walton: By synergism, Dr. Parker, you mean the results are greater than would be anticipated from the simple addition of the effects of the two drugs. In other words, you are speaking of potentiated effects rather than simply additive effects.

Dr. Parker: I'm referring to a true synergistic effect. Not an additive effect.

Question: I would like to hear a little discussion on the duration of therapy with these antibiotics in some of the conditions such as pneumonia and streptococcic sore throat.

Dr. Parker: In pneumonia, it has been our policy to administer antibiotics until the patient has been afebrile for two days.

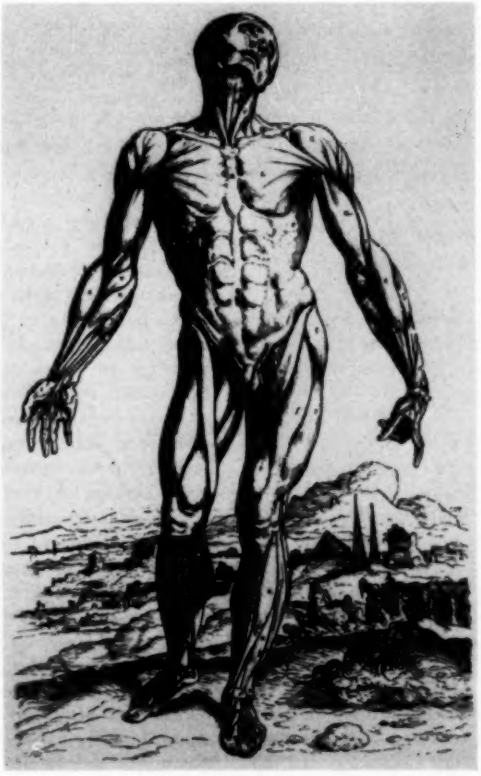
In some rickettsial diseases, such as Rocky Mountain spotted fever, one does not have to administer the drug for even that long a period of time. Probably, specific therapy can be stopped once the patient becomes afebrile since, in the majority of cases, a relapse will not occur. In streptococcal sore throat, antibiotic therapy should be continued for ten days. However, I think, as a general rule, for most infectious diseases antibiotic therapy should be continued for approximately two days after the patient becomes afebrile.

Question: A report came from California within the last six months of arrest or putting people in a state of quiescence in ulcerative colitis with isoniazid. Have any of you on the panel or in the audience had any experience with this?

Answer: No.

Question: I would like to ask Dr. Parker about his ideas on the prophylaxis of rheumatic fever.

Dr. Parker: I think the use of antibiotic therapy for prophylaxis against rheumatic fever is now well established. I do not know what the duration of such prophylactic treatment should be. As you know, the American Heart Association recommends that it be continued indefinitely, for life, if necessary. For the present, I believe this suggestion is reasonable, although we may have to revise it later on.



From Vesalius

AGRANULOCYTOSIS DUE TO CHLORPROMAZINE

REPORT OF A CASE WITH RECOVERY

CHARLES R. HOLMES, M. D.
Columbia, S. C.
and
HALSTED M. STONE, M. D.
Chester, S. C.

Chlorpromazine (Thorazine), a new chemical compound [10-(3-dimethylaminopropyl)-2-chlorphenothiazine hydrochloride] became available for medical use in this country in May 1954. Since that time, it has found widespread acceptance. It has proven useful in many different clinical situations, being particularly of value in aiding in the control of nausea and vomiting regardless of the cause; as a "tranquilizing" agent in psychiatric patients and in reducing the narcotic requirements of patients with malignant lesions. Because of its chemical structure, it is not surprising that hematological complications should occur. Due to the nature of many of the conditions for which Thorazine is most applicable, long-term administration is frequently necessary. These two facts make it mandatory that one be aware of the possible complications that may result from therapy. The case reported is illustrative of one of these possible complications.

Case Report: E.O.R., a 55-year-old white female was first admitted to the Chester County Hospital January 25, 1955. At the time of her admission, she was complaining of fever and pain in the perineal region.

The patient had been in good health and had never been seriously ill until September 1954. At that time, she consulted a local physician because of the complaint of nervousness and palpitation. The patient's heart was found to be moderately enlarged, and was fibrillating. She was treated with quinidine, which caused a reversion to normal sinus rhythm.

There remained, however, premature auricular contractions and the patient continued to complain of nervousness. Accordingly, in the latter part of November 1954, the patient was given Thorazine, 25 mgm. three times a day, which medication she continued to take until she was admitted to the hospital January 25, 1955. The only other medication that the patient had taken was quinidine, 3 grains, three times a day, which was necessary to maintain the normal sinus rhythm. The patient got along very well until January 22, 1955, when she consulted one of us (HMS) because of fever and general malaise. The temperature was found to be 101 degrees and the patient appeared moderately ill but without any localizing signs. It was felt that the patient probably had influenza. She was given penicillin and erythromycin but due to lack of response, she was admitted to the hospital January 25, 1955.

A complete blood count had been done the 6th of October 1954, and had been normal in all respects.

The past history, review of systems, and family history were not contributory to the present illness.

On admission to the hospital, the patient's temperature was 103°, pulse 120, respirations 22. The patient was a well-developed and well-nourished white female, who appeared acutely ill. The blood pressure was 152/90. The heart was moderately enlarged to the left, the left border lying one to two cm. outside the mid-clavicular line. The sounds were clear and of good quality, the rhythm was basically regular with frequent premature contractions. The lungs were clear. The liver was not enlarged, and there was no distention of the cervical veins. In the right labium majus was felt an area of induration with redness which measured some five cm. in diameter. This was exquisitely tender. Pelvic and rectal examinations were normal. The remainder of a complete physical examination revealed no other abnormalities.

An electrocardiogram, taken the day of admission, revealed a normal sinus rhythm with frequent premature auricular contractions. A roentgenogram of the chest, likewise taken on the day of admission, revealed mild cardiac enlargement and minimal pulmonary congestion. The aortic arch was calcified.

A urinalysis was negative with the exception of a trace of albumin. Three blood cultures subsequently were found to be negative. The results of the various blood counts are given in Table Number One.

On admission, the Thorazine was discontinued; quinidine, 3 grains, was given 3 times a day; and the patient was begun on tetracycline, 500 mgm. intramuscular every 8 hours. On January 26, the patient was given one pint of blood and begun on cortisone, 100 mgm. every 12 hours intramuscularly. The pa-

TABLE I

DATE	HB (Gms.)	WBC	PMN	BASO	EOSIN	LYMPH	MONO	NUCLEATED RBC's
1/25/55	78	1,000	1%	2%	0	96%	1%	0
1/26/55*	--	1,100	0	1%	0	97%	2%	0
1/27/55*	78	1,100	0	1%	0	97%	2%	0
1/28/55*	85	1,000	0	0	0	97%	3%	0
1/29/55	95	900	0	1%	0	96%	3%	0
1/30/55	98	1,200	2%	0	0	94%	4%	0
1/31/55	104	4,300	47%	1%	0	50%	2%	6/100 WBC's
2/ 1/55	107	7,950	59%	0	1%	36%	4%	"few"
2/ 2/55	100	13,850	68%	0	0	31%	1%	"few"
2/ 3/55	95	19,700	71%	0	0	28%	1%	0
2/14/55	--	8,550	71%	0	0	29%	0	0
2/22/55	--	4,600	55%	2%	9%	33%	1%	0

(* — Blood Transfusion Given)

tient subsequently received one pint of blood on the 27th and 28th of January. On January 29, the patient's cardiac status had deteriorated somewhat; there were now present moist rales in the bases of both lungs, and the heart rhythm was more rapid and irregular. Accordingly, the patient was given digitoxin, receiving a digitalizing dose over the next 3 days. That same day, a sternal marrow examination performed by one of us (CRH) revealed typical maturation arrest of the myelocytic series. Photomicrographs of the bone marrow and the differential count are given in the illustration below and in Table Number Two. On this same day, treatment was begun with penicillin, 800,000 units every 12 hours and 0.5 gram of streptomycin every 12 hours. She was likewise given ACTH, receiving 20 units in 1,000 ml. of 5% glucose in distilled water. The cortisone dosage was decreased to 50 mgm. twice a day. This dose of ACTH was continued through February 7, 1955, when it was discontinued. The cortisone dosage was decreased, beginning February 3, and finally completely discontinued February 10. The patient's temperature fell to normal on January 29, remained subnormal for the next 48 hours, and then remained normal for the remainder of her hospital stay.

TABLE II

Bone Marrow Examination 29th January 1955

Myeloblasts	0
Myelocytes	61
Juvenile	0
Polymorphonuclear	0.5
Eosinophil	0
Basophil	0
Lymphoblast	0
Large lymphocyte	1
Small lymphocyte	5
Erythroblast	1
Normoblast	30.5
Plasma cell	0.5
Megakaryocyte	0.5

M/E ratio: 2.10

All figures in percentage.

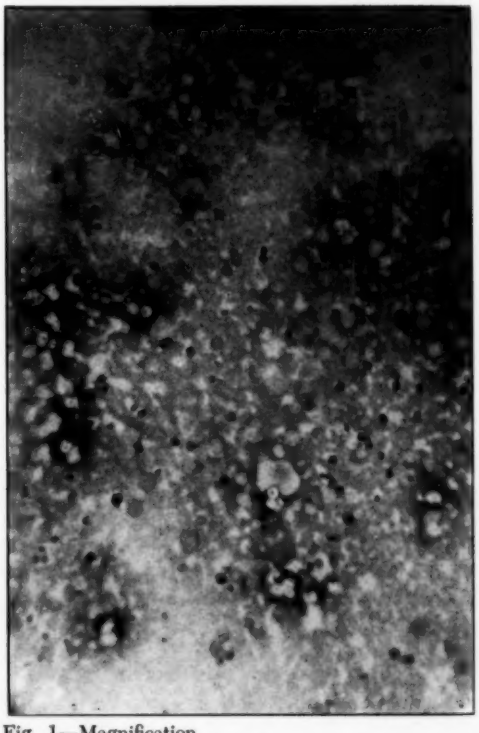


Fig. 1—Magnification
Objective . . . 10x
Eye Piece . . . 10x
Tube Length . . . 160mm
Projection Distance . . 250mm (10 in.)
10x10=100x1 equals 100x Magnification

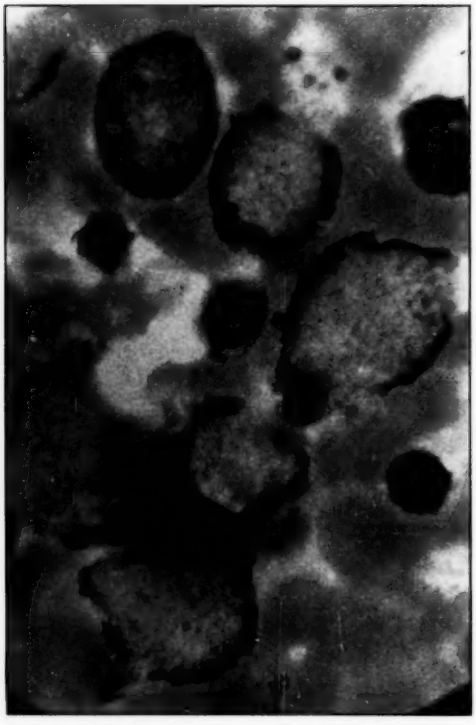


Fig. 2—Magnification
Objective . . . 97x
Eye Piece . . . 10x
Tube Length . . . 160mm
Projection Distance . . 250mm (10 in.)
10x97x1 equals 970x Magnification

View showing myelocytes and normal RBC precursors and platelets (X1940).

The area of cellulitis in the right labium enlarged during the first two or three days of hospitalization, then remained stationary without any evidence of fluctuation or suppuration, and finally sloughed cleanly February 2, 1955. The area granulated well, and healing was satisfactory at the time of the patient's discharge.

Since discharge, the patient has continued on digitalis and has taken quinidine intermittently. Her blood count has been checked at frequent intervals and has been found to remain normal.

COMMENT

It is, of course, not possible to state categorically that this patient's agranulocytosis was due to Thorazine. However, the typical bone marrow appearance of "maturation arrest" of the myelocytic series, the reappearance of polymorphs 8 days after discontinuance of Thorazine and her complete recovery fairly well preclude any other interpretation.

Agranulocytosis has been reported as occurring as a result of quinidine administration,[1] but this drug was continued during the height of the patient's illness without any deleterious effect. The patient has since continued to receive it intermittently, and her blood count has remained normal.

Three previous cases have been reported in which agranulocytosis is thought to have occurred as a result of Thorazine administration. In the first case,[2] the patient received 50 mgm. of Thorazine 3 times a day for a total of 6 gm., at which time agranulocytosis was diagnosed. No bone marrow examination is reported. The patient was treated with penicillin and cortisone and made an uneventful recovery. The second case,[3] occurred in a patient who was given Thorazine in increasing dosage for 3 months, the final dosage being 80 mgm. 4 times a day. The patient was also receiving phenobarbital and had taken two Ex-Lax tablets two days before the symptoms of agranulocytosis developed. A bone marrow examination was reported as revealing "a totally acellular, aplastic bone marrow". The patient received antibiotics only. Her course was complicated also by the presence of heart disease, and the patient is stated to have died in pulmonary edema without, however, any reappearance of polymorphs in her peripheral blood. A blood culture was reported as "heavily laden with pseudomonas aeruginosa". The third case,[4] occurred in a patient in whom there was strong question as to the presence of lymphatic leukemia. The patient received Thorazine, 25 mgm. twice daily from August 11, 1954 to September 1, 1954, and became ill on September 10, 1954. This patient also had jaundice. In spite of intensive therapy, including ACTH and antibiotics, the patient developed acute pulmonary edema and died with peripheral cardiovascular collapse. At autopsy, the bone marrow was stated to be "--hypocellular and showed no evidence of leukemia. Maturation of the granulocytic series was not evident beyond the myelocyte stage".

Two other significant complications of therapy with Thorazine have been reported. The first of these is jaundice[5] which has all the laboratory features of the obstructive type of jaundice, and the second is the recent report[6] of two cases of contact dermatitis.

Considering the widespread use of Thorazine the total number of reported severe side effects to date is quite small. It has been estimated[7] that the incidence of agranulocytosis, if all the reported cases are accepted as being due to Thorazine, is in the neighborhood of one in 166,000 cases. In spite of the apparent rarity of these serious side effects of therapy with Thorazine, the possibility of their occurrence must be borne in mind and suitable precautionary measures of interval blood counts or other indicated laboratory procedures be carried out. This is particularly true in those patients who receive the drug for a prolonged period of time.

Summary

A patient who had received Thorazine for three and one-half months developed complete agranulocytosis with evidence of a maturation arrest of the myelocytic series on bone marrow examination. Exactly 8 days after discontinuance of Thorazine and following the use of antibiotics, ACTH, and cortisone, polymorphonuclear cells reappeared in her peripheral blood, and the patient subsequently made a complete recovery. Though this complication of therapy with Thorazine is apparently quite rare, the possibility of its occurrence should be kept in mind. All patients receiving the drug for prolonged periods of time should have periodic complete blood examination.

REFERENCES

(1) Brown, E. A.: Drug Allergy. Quart. Rev. Allergy 7:51, March 1953.
(2) Lomas, J.: Chlorpromazine and Agranulocytosis, Correspondence. Brit. M. J. 2:358, Aug. 7, 1954.
(3) Boleman, A. P., Jr.: Agranulocytosis Associated with Administration of Thorazine, Correspondence. J.A.M.A. 157:364, Jan. 22, 1955.
(4) Hodges, H. H. & LaZerte, G. D.: Jaundice and Agranulocytosis with Fatality Following Chlorpromazine Therapy. J.A.M.A. 158:114, May 14, 1955.
(5) Loftus, L. R. et al.: Jaundice Caused by Chlorpromazine (Thorazine). J.A.M.A. 157:1286, April 9, 1955.
(6) Lewis, G. M. & Sawicky, H. H.: Contact Dermatitis from Chlorpromazine. J.A.M.A. 157:909, March 12, 1955.
(7) Brown, D. B.: Personal Communication.

Dr. Thomas Cooper

PYRIDOSTIGMINE (MESTINON) IN MYASTHENIA GRAVIS

A CASE REPORT

RICHARD S. POLLITZER, M. D.
Spartanburg, S. C.

Myasthenia gravis is an illness manifested by weakness of voluntary muscles, especially those of the facial area.[1] This weakness is thought to be due to some disturbance in the physiology of the neuromuscular junction.[2]

Normally in the neuromuscular junction, acetylcholine is liberated at the nerve ending, initiating electrical changes that result in the stimulation of the voluntary muscle fibers (Fig. 1). Acetylcholine is destroyed by cholinesterase, being hydrolyzed to acetate and choline. Cholinesterase is then converted into an inert material.

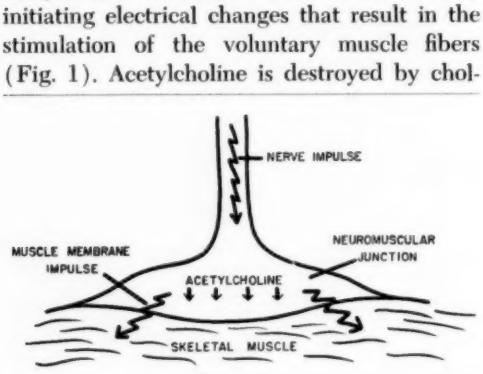


Figure 1-A

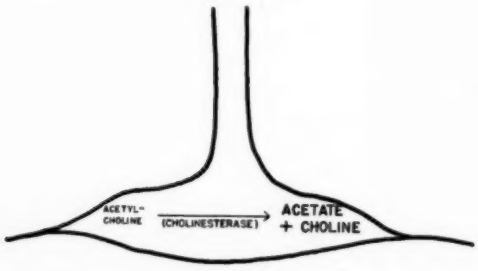


Figure 1-B

In myasthenia gravis there appears to be a disturbance at the neuromuscular junction so that acetylcholine has a decreased effect on the muscles.[3] The *relative* insufficiency of acetylcholine is possibly due to the presence of a chemical substance which, like curare, blocks the access of acetylcholine to the muscle end-plate.

Modern therapy involves the production of a *relative* increase in acetylcholine. This is accomplished by inactivating cholinesterase.[4] (Fig. 2).

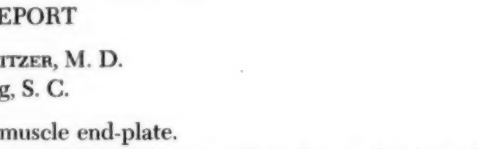


Figure 2

Since 1935 neostigmine (Prostigmin) has been used as an anticholinesterase agent. The inactivation of cholinesterase allows for a greater accumulation of acetylcholine at the muscle end-plate permitting effective neuromuscular transmission and greater muscle strength in myasthenia. Neostigmine also has an anti-curare effect.[5]

Neostigmine has the disadvantage, however, of producing strong parasympathetic stimulation resulting in lacrimation, salivation, nausea, vomiting, abdominal cramps, diarrhea and bradycardia. In the past few months a derivative of neostigmine has become available commercially. This new preparation is known as pyridostigmine (Mestinon), and has received favorable reports from several investigators.[5, 6, 7, 8] Its chief advantages are decreased incidence of gastrointestinal and other parasympathetic side-effects and a somewhat greater duration of action especially at night.[5]

The present case is presented to show that the drug has proven satisfactory for use in a general hospital.

REPORT OF CASE

F. M., a 28 year old white male, was admitted to

the Spartanburg General Hospital on May 16, 1955, because of weakness of nine years' duration. The diagnosis of myasthenia gravis had been made after the onset of symptoms, at a Veterans' Administration Hospital.

He had been taking Prostigmin for years, but had found it necessary to increase the dose to extremely high levels. At the time of this admission, he was requiring up to 1.5 ml. of Prostigmin 1:1000 (1.5 mg) I.M. every thirty minutes. On this dosage he had developed diarrhea, abdominal cramps, salivation and troublesome pharyngeal over-secretion.

Examination revealed an asthenic-looking, young, white male with dysarthria so severe that his speech was almost unintelligible. The corners of his mouth turned downward, and saliva drooled from them. There was ptosis of both lids. There was marked weakness of all muscles; this was especially well demonstrated in his poor hand grip and inability to walk. Pulse pressure was narrow, the systolic blood pressure being 110, and the diastolic 98.

The patient was given ephedrine, 25 mgm. every eight hours. Transfusions were given. Atropine sulfate 0.3 mgm. was given every 6 hours to decrease his gastrointestinal symptoms.

The Prostigmin dosage was reduced to 1 ml. of 1:2000 (0.5 mgm) I.M. hourly. Mestinon was then started in a dosage of 30 mgm. (½ tablet) orally every 6 hours.

Twenty-four hours later, the patient volunteered, "I could run around the hospital several times". Examination revealed increased muscle strength.

The dosage of Mestinon was gradually increased and the Prostigmin dosage was gradually decreased. The diarrhea and other cholinergic side-effects disappeared. Eleven days after the initiation of Mestinon therapy, the patient was dismissed on Mestinon, 60 mgm. orally four times a day, plus 0.5 ml. Prostigmin 1:1000 (0.5 mg) I.M. four times a day. He was also given small doses of ephedrine, potassium and atropine.

SUMMARY

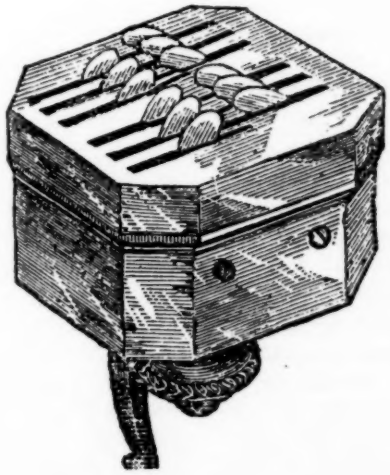
A case of myasthenia gravis is presented and the use of pyridostigmine (Mestinon) described.

ACKNOWLEDGEMENTS

The author wishes to express his appreciation to Dr. Thomas C. Fleming and Mr. David Dempsey of Hoffman-LaRoche; Dr. W. N. Cochran, Dr. J. W. Blanton, and Dr. David Baxley.

REFERENCES

1. Viets, Henry R.: Myasthenia Gravis, in Cecil, Russell L., Textbook of Medicine, Philadelphia, W. B. Saunders Co., 1951.
2. Best, C. H., and Taylor, N. B., Physiological Basis of Medical Practice, Baltimore, The Williams & Wilkins Co., 1950.
3. Wilson, A. & Stoner, H. B. Quart J. Med., *13*: 1, 1944.
4. Krantz, John C., Jr., and Carr, C. Jelleff, The Pharmacologic Principles of Medical Practice, Baltimore, The Williams & Wilkins Co., 1949.
5. Osserman, Kermit E., Teng., Paul, and Kaplan, Lawrence I., Studies in Myasthenia Gravis, J.A.M.A., *155*: 961, 1954.
6. Westerberg, Martha R., and Magee, Kenneth R., Mestinon in the Treatment of Myasthenia Gravis, Neurology, *4*: 762, 1954.
7. Schwab, Robert S., and Timberlake William H., Pyridostigmine (Mestinon) in the treatment of Myasthenia Gravis, New England J. Med., *251*: 271, 1954.
8. Tether, J. E., Mestinon in Myasthenia Gravis, Diseases of the Nervous System, *15*: 1954.



POSTPARTUM PITUITARY INFARCTION (SHEEHAN'S SYNDROME)

REPORT OF THREE CASES

C. T. Prevost, M. D.
Anderson, S. C.

In 1914 Simmonds[1] described the case of a woman who at 35 years of age had puerperal sepsis and whose clinical course during the next 11 years was marked by amenorrhea, emaciation, and premature senility. At death pituitary fibrosis was found. By 1918 he[2] added additional cases of proved anterior lobe destruction with symptomatology.

In 1937 and 1939 Sheehan[3] described the relationship of severe postpartum hemorrhage with shock and coma, and anterior lobe infarction with necrosis. In July, 1954, he reported additional cases,[4] and in all the literature could account for 97 cases proved by autopsy and 226 cases of the clinical syndrome without autopsy proof. He added to the symtomatology and pathology.

Although this is a fairly large group of reported cases, nevertheless the disease is relatively rare. During a 10 year period of study and observation of the occurrence of postpartum hemorrhage and shock with hypophyseal necrosis at the Malmo[5] General Hospital (Sweden) there were 30,158 births. Five hundred and ninety-nine of these patients each lost over 1000 ml. of blood at parturition and 548 were retraced and interviewed and in none of these were there any definite signs of Sheehan's syndrome.

According to Sheehan[3] during the latter part of pregnancy the anterior lobe may increase to two or three times its normal size, but it usually returns to normal following parturition. Postpartum hemorrhage severe enough to cause a drop in blood pressure, especially if sustained, may produce a specific arrest[4] in the blood supply of the anterior pituitary lobe which undergoes ischemic necrosis (infarction). In about one-half of the cases 95 to 98 percent of the anterior lobe becomes infarcted, and from a practical standpoint, the completeness of destruction is often greater than occurs in any of the other pathological processes, even by surgical hypophysectomy in humans. Although necrosis begins at delivery it is difficult to recognize by ordinary histological methods until it is at least 12 hours old. Within a few months the necrotic area heals as a small scar which remains unchanged for years. Symptoms are dependent upon the completeness of the anterior lobe destruction with decrease of the adrenocorticotrophic, thyrotrophic, gonadotrophic, and sometimes the lactogenic hormones and subsequent atrophy of their respective target glands. If secretion of one or two of these hormones is deficient, "selective" or partial hypopituitarism[6] is the result. If all these hormones are deficient the condition is known as "panhypopituitarism". If less than 50 percent[3] of the anterior lobe is destroyed, probably no symptoms result. Slight to moderate symptoms occur when about 75 percent is destroyed, and severe symptoms when 95 percent or more is destroyed.

Symptoms include peripheral vascular collapse attending a full term delivery. Following delivery the breasts do not lactate and rapidly undergo involution. Later atrophy of the breasts may occur, although sometimes the breasts do not become atrophic. As time passes there is atrophy of the genitalia, loss of libido, general loss of hair and failure of regrowth of pubic hair. In most patients there is permanent amenorrhea.

The skin becomes dry, the nails brittle. There is increased sensitivity to cold, increased tendency to infection, weakness, drowsiness, and constipation with episodes of nausea and vomiting. Symptoms may be severe with mental confusion, delirium, deterioration, coma and death all within a few days, or may be milder with gradual deterioration over a period of years, with chronic invalidism. Some

patients may live 20 years or more with well defined hypopituitarism. Others may demonstrate mild symptoms and signs for a while and then gradually recover completely. Sheehan and Murdock[7] claim that after treatment with follicular stimulating hormone one patient ovulated, became pregnant, and was cured after 4 years of illness.

The blood pressure is normal or subnormal, as is the pulse, respiration, and temperature. Most patients present no weight loss, though some are cachectic. Signs of myxedema with dull, apathetic, puffy facies, dry skin, sallow complexion, sparse axillary and pubic hair, thinness of eyebrows, coarse voice, and lethargy are usually present. However, in a few patients the facial appearance is normal, occasionally with smooth, shiny, or soft skin, especially about the face. The breasts may be normal or atrophic. The vaginal mucosa is thin and rugae are absent.

At autopsy the posterior lobe and pars tuberalis are usually normal (blood supply from the inferior hypophyseal artery[10]) but scarcely 10 percent of the anterior lobe may remain in association with necrosis and fibrosis. The adrenal cortex is usually atrophic and very often cannot be found grossly, though the medulla appears ormal. The thyroid and gonads are usually atrophic, but the other ductless glands appear normal.

Case 1.—A 34 year old white woman was admitted to the medical service of the Anderson Memorial Hospital, June 24, 1951, because of bleeding of the gums, infection, chilly sensations, and fever following a tooth extraction. She also complained of disproportionate weakness, fatigue, anorexia, and weight loss with occasional episodes of nausea and vomiting of several years duration, in addition to progressive pyorrhea and dental caries.

Past History.—Her first 5 pregnancies were attended at home without complication, though profuse bleeding occurred with delivery of the sixth baby. Her seventh and last baby had been delivered in the hospital 5 years previously, when she was 29 years of age, at which time she lost a considerable amount of blood, and remained in a mild state of shock with much nausea and vomiting for 2 days. Her shock-like state was finally controlled by administration of 500 ml. of blood, parenteral fluid, and other supportive measures. She could remember no details for a week following delivery, when she recalls rather severe bilateral headache which gradually subsided after a few days, with an occasional similar headache since. Her anemia had been severe and apparently could not be corrected, although her menses had not returned. Although her usual weight had been between 110 and 116 pounds, she had since weighed less than 100 pounds. She did not lactate from either breast after delivery whereas lactation had occurred to a normal degree in association with previous pregnancies.

There had been gradual loss of axilliary hair, and pubic hair had never regrown. Her voice had become weak and husky. She had had frequent upper respiratory infections, and progressive pyorrhea with some loss of teeth. She was especially sensitive to cold weather. Constipation had become severe, associated with recurrent episodes of griping abdominal pain and some abdominal swelling.

The significant physical findings, the course and treatment are listed in table 1. The significant laboratory findings are listed in table 2.

Case 2.—A 37 year old white woman was seen for the first time December 3, 1954, with complaints of anemia, hay fever, exhaustion, and amenorrhea. From the onset of menses at 13, her periods had occurred irregularly every 28 days to 3 months. When she was 21 she became pregnant with her first child, which was delivered at home approximately 9 months thereafter. Following delivery she lost much blood and went into shock and coma for several hours, but recovered without fluid or blood. She remained disproportionately weak and anemic. During the following 5 years menstruation became even more scanty and more irregular, recurring approximately every 3 to 4 months. Because of amenorrhea she sought medical attention and on one occasion was given a series of injections of estrogen in oil and following this, menstruated well for one period. Immediately thereafter her second pregnancy occurred and 9 months later she had a normal child. This was 11 years ago and she has not menstruated since. Axillary and pubic hair have been very scanty. Disproportionate fatigue with exhaustion had gradually become worse, especially during the several months prior to being seen the first time.

Review of Systems.—Revealed weakness, dry skin, slightly painful stiffness of lower part of the cervical spine; one to three upper respiratory infections each year.

(See table 1 for physical findings, treatment, and course and see table 2 for laboratory findings.)

Case 3.—A 36 year old white woman was admitted in labor and preeclampsia to the obstetrical service of the Anderson Memorial Hospital, September 27, 1954, with a blood pressure of 190/100 and two plus albumen. Soon after admission she was delivered of twins, the product of her ninth pregnancy. The estimated blood loss at delivery was 350 ml. but she continued to bleed during the next several hours, when 15 hours after delivery she was observed to be

in a shock-like state with a blood pressure of 70/40 and a hemoglobin of 8.5 grams. She was given 1500 ml. of whole blood and from the second day through the ninth postpartum day ran fever of 102 to 103 degrees from septic endometritis.

Upon returning home she remained in bed for the next 2½ months because she was simply too tired and weak to get up. Water and food intake had become progressively diminished and nausea, vomiting, lethargy, and deterioration increased during the 4 or 5 days prior to admission. Waxy pallow, weight loss, and increased dryness of the skin had been progressive.

(See table 1 for physical findings, treatment, and course and see table 2 for laboratory findings)

Treatment consists primarily in replacement of the diminished hormones. There is no potent polyvalent pituitary preparation available. ACTH may be used early in the course of the disease in an attempt to restimulate the adrenal cortices. Some patients[11] have responded well and have been maintained on ACTH.

Most patients will require cortisone or hydrocortisone orally, with maintenance dosages of cortisone from 25 to 50 mgs. each day. However, 1 mg. of 9-alpha-fluorohydrocortisone by mouth is equivalent to 15 to 25 mgs. of oral cortisone.[12] Patients with severe Addison's disease have been maintained on as little as .25 mgs. of fluorohydrocortisone in a single daily oral dose, but the average patient with adrenal cortical insufficiency will probably require 1 to 2 mgs. in a single oral dose. This mineral retaining corticoid should be supplemented with approximately 2.5 mgs. of cortisone if maximum achievement of a sense of well being and better correction of blood glucose and uric acid excretion levels are to be accomplished. Liquorice extract[13] (or glycyrrhetic acid) apparently potentiates

TABLE I—SIGNIFICANT PHYSICAL FINDINGS

	Case #1	Case #2	Case #3		
	First Visit	First Visit	First Visit	Additional Observation	
Date	6-24-51 — 8-4-51	12-3-54	9-27-54 — 12-23-54	6-13-55	8-3-55 - 8-24-55
General Appearance	chronically ill	mildly chronically ill	chronically ill weak, lethargic	improved	unchanged
Habitus	gracile poorly developed	average — well developed	average — well developed	unchanged	unchanged
BP Maximum	110/70	110/70	106/70	*178/112	118/96
BP Minimum	90/60		80/60		110/60
Pulse	110 regular	88	136	84	80
Skin	pale, sallow, dry, loose	pale, dry, coarse	dry, coarse, sallow	unchanged	unchanged
Hair	no axillary sparse pubic	no axillary scanty pubic	axillary and pubic sparse	unchanged	unchanged
Pelvic	atrophy of external genitalia, vaginal mucosa and uterus	atrophic thin vaginal mucosa, small cervix and uterus	vaginal mucosa thin, atrophic without rugae	unchanged	unchanged
Wgt. Initial	6/24/51—90 lbs.	12/3/54—133 lbs.	9/27/54—114 lbs.	116 lbs.	118 lbs.
Wgt. Recent	8/4/55—91¾ lbs.	9/8/55—143 lbs.			

TREATMENT, RESPONSE, AND COURSE SINCE INITIAL OBSERVATIONS

CASE 1—Bleeding swollen left lower gum. Responded to parenteral injections and later maintained on subcutaneous implantations of desoxycorticosterone and testosterone, and desiccated thyroid. Recently maintained on ACTH gel 80 u. each 3rd day, Gynetone repetabs, .04 mgs. (0.04 mgs. ethinyl estradiol & 10 mgs. methyltestosterone U.S.P.) & desiccated thyroid. Seven additional hospital admissions because of infections or adrenal crisis.

CASE 2—Responded well and is maintained on hydrocortisone, 20 mgs. each 12 hrs. desiccated thyroid, grains 1½ each day, and gynetone repetabs, .04 mgs. each day. Two hospitalizations since initial observation due to infections associated with adrenal crises.

CASE 3—Responded well and is maintained on hydrocortisone, 10 mgs. each 12 hrs; desiccated thyroid grains 1½ each day; and Gynetone repetabs, .04 mgs. each day.

6/13/55—*Several daily observations. Had omitted medication for 5 mos. Regitine test for pheochromocytoma (5 mgs. I. V.) produced drop in blood pressure from 178/112 to 100/80 within 60 seconds, & with gradual return to 156/112 within 10 minutes.

8/3/55—Histamine base .04 mgs. I. V. without hypertensive response. Bilateral adrenal exploration failed to demonstrate pheochromocytoma but showed the adrenals to be about ½ average size.

TABLE II—LABORATORY STUDIES

Gland	Test	Findings in Pituitary insufficiency	Case #1	Case #2	Case #3
Pituitary	Roentgenogram sella turcica	normal	normal	normal	normal
Thyroid	Basal metabolic rate	low	minus 29%	minus 26%	minus 40%
	Serum cholesterol	normal or elevated	180 mgs. %		269 mgs. %
Adrenal Cortex	Robinson-Power-Kepler water test	"A" below 25; night spec. greater than 1 hr. day	"A" 2.9; night 450 ml. largest 1 hr. day 90 ml.	night 255 ml. largest 1 hr. day 73 ml.	"A" 8.6; night 265 ml. largest 1 hr. day 54 ml.
	Serum chloride Thorn test with ACTH (IM)	normal to low decrease in eosinophils 50% or more	93.3 m. eq/1 no response Fasting 154 4 hrs. 231	92.9 m. eq/1 no response fasting 177 4 hrs. 200	120.1 m. eq/1 no response fasting 333 4 hrs. 322
Ovaries	Vaginal smear	loss of estrogen effect	loss of estrogen effect	loss of estrogen effect	loss of estrogen effect
General	Fasting blood sugar	low	58 mgs. %	82 mgs. %	110 mgs. %
	Oral glucose tolerance test	flat curve	normal		3.8 units insulin IV dropped blood sugar from 110 to 60 mgs. in 30 mins.
	Insulin tolerance test	hypoglycemic unresponsiveness			
	Hemoglobin and R. B. C. W. B. C. and differential	hypo, normo, or hyperchromic anemia normal or diminished WBC; relative lymphocytosis	hgb. 11.0 grams RBC 3.5 mill 7100; 60% segs. 40% lym.	9.8 grams RBC 3.0 mill 5200; 58% segs. 1% eos; 41% lym.	9.0 grams RBC 3.15 mill 5400; 60% segs; 3% eos; 37% lym.

the action of cortisone in some patients with Addison's disease, or Simmond's syndrome. If infection occurs, cortisone or hydrocortisone along with desoxycorticosterone and wide spectrum antibiotics should be employed.[14] Coma from acute adrenal crisis should be treated immediately with intravenous adrenal cortical extract or hydrocortisone.

If adequate cortical replacement therapy is being maintained, desiccated thyroid may be begun in dosage of one-half grain daily with gradual increase to one or one and one-half grains each day during the subsequent 2 to 3 weeks. There is great danger in precipitating adrenal crisis in patients with pituitary insufficiency if thyroid is administered without adequate cortical replacement.

The administration of testosterone, 25 mgs. intramuscularly each other day, greatly adds to the patient's strength, weight, sense of well being, ambition, and libido. Seventy-five milligram testosterone pellets may be implanted subcutaneously and the effect will last for 3 to 6 months. In women below the age of 45 an estrogen with testosterone is probably the better combination.[6]

Differential Diagnosis

Postpartum pituitary necrosis must be differentiated from other disease processes capable of producing pituitary insufficiency. Among the most common are basilar meningitis, cavernous sinus thrombosis, traumatic injuries to the skull or brain, malignant hypertension, cerebral arteriosclerosis, hyperplasia of the chromophobe cells with the formation of chromophobe adenoma, and craniopharyngioma (Rathke's pouch tumor) and parasellar cysts.[8] Usually these may be excluded by the absence of history of severe postpartum hemorrhage, shock, or suspected because of a gradual or insidious onset frequently associated with headache, visual disturbances, and other symptoms and signs of pituitary space occupying lesions, and by x-ray evidence of erosion of the sella turcica.

However, anorexia nervosa remains the most difficult syndrome to be differentiated. Patients with starvation syndromes, including anorexia nervosa, may present all of the symptoms, signs, and laboratory findings of severe

pituitary insufficiency.[15] These patients are usually unmarried and there is no history of postpartum hemorrhage. There is frequently a history of psychosomatic rebellion. Most important is cachexia, not frequently observed in Sheehan's disease. There is usually no significant loss of pubic or axillary hair and frequently there is a fine lanugo, not observed in Sheehan's syndrome. These patients may respond to forced feeding and psychotherapy, but seldom respond to hormones.

Summary and Conclusion

Pituitary infarction with subsequent anterior lobe insufficiency may occur in association with postpartum hemorrhage. The syndrome probably occurs more frequently than is commonly realized. The diagnosis can usually be made from the history and physical findings, and confirmed by tests usually available in the average hospital laboratory. Three cases are presented.

REFERENCES

1. Simmonds, M.: Ueber Hypophysisschwund mit todlichem Ausgang, Deutsche med. Wchnschr. 40:322, (Feb.) 1914.
2. (a) Simmonds, M.: Atrophie des Hypophysisvorderlappens und hypophysare Kachexie, Münchem. med. Wchnschr. 65:441, (Apr. 16) 1918. (b) Simmonds, M.: Atrophie des Hypophysisvorderlappens und hypophysare Kachexie, Deutsche med. Wchnschr. 44:852, (Aug. 1) 1918.
3. (a) Sheehan, H. L.: Post-Partum Necrosis of the Anterior Pituitary. J. Path. & Bact. 45:189, (July) 1937. (b) Sheehan, H. L.: Simmonds's Disease Due to Post-Partum Necrosis of the Anterior Pituitary. Quart. J. Med. n. s. 8:277, (Oct.) 1939.
4. Sheehan, H. L.: The Incidence of Postpartum Hypopituitarism. Am. J. Obst. & Gynec. 68:202, (July) 1954.
5. Mansson, B.: Post-Partum Necrosis of the Anterior Pituitary: An Analysis of the Records of the Malmo General Hospital, Sweden, for the Period 1939-1948. Glasgow M. J. 34:544, (Dec.) 1953.
6. McCullagh, E. P., Skillern, P. G., and Schaffenburg, C. A.: The Use of Cortisone in the Treatment of the Panhypopituitarism Due to Postpartum Necrosis of the Pituitary (Sheehan's Syndrome). Cleveland Clin. Quart. 21: 31, (Jan.) 1954.
7. Sheehan, H. L. and Murdoch, R.: Postpartum Necrosis of the Anterior Pituitary, Production of Subsequent Pregnancy. Lancet 1:818, (Apr. 8) 1939.
8. Williams, R. H.: Textbook of Endocrinology, Philadelphia, W. B. Saunders Company, 1950, chap. 2.
9. Zimmerman, W. J., Sutton, P. E., Boyajian, A.: Postpartum Pituitary Necrosis. J. Michigan M. Soc. 53:164, (Feb.) 1954.
10. Xuereb, G. P., Prichard, M. M. L., Daniel, P. M.: The Arterial Supply and Venous Drainage of the Human Hypophysis Cerebri. Quart. J. Exper. Physiol. 39:199, 1954.
11. Ekholm, R.: ACTH Therapy in Pituitary Insufficiency. Acta med. Scandinav. 144:62, (Oct.) 1952.
12. Goldfien, A., and others: Fluorohydrocortisone and Chlorohydrocortisone, Highly Potent Derivatives of Compound F. New England J. Med. 252:415, (Mar. 17) 1955.
13. Borst, J. G. G., Ten Holt, S. P., De Vries, L. A., and Molhuysen, J. A.: Potentiation of the Actions of Liquorice Extract and Cortisone in 2 Patients Suffering From Addison's Disease and one Patient Suffering From Simmonds's Disease. Nederl. tijdschr. geneesk. 97:2631, 1953.
14. Knowlton, A. I.: Adrenal Cortical Physiology in Health and Disease. M. Clin. N. America, p. 811, May, 1955.
15. Perloff, W. H., and others: The Starvation State and Functional Hypopituitarism. J.A.M.A. 155: 1307, August 7, 1954.

ELECTROCARDIOGRAM OF THE MONTH*

DALE GROOM, M. D.**
Charleston, S. C.

Case Record—A 70 year old lady who had previously been well and active was admitted to the hospital following an unexplained fainting spell. Apparently she had suddenly lost consciousness but recovered promptly without being observed. Her only other complaints were of dyspnea, mostly at night, and a "throbbing sensation" at times in the left side of the chest, both symptoms of about two months duration. The patient also acknowledged having experienced several transitory dizzy spells during this period of time. There was no history of chest pain or of previous cardiovascular disability.

On physical examination she was observed to have a blood pressure of 190/100 and an irregular pulse at a rate of about 56 per minute. There was moderate distention of the liver and neck veins with some pitting edema of the lower extremities. Moist rales were heard in both lung bases posteriorly. A blowing systolic murmur was audible in the region of the apex.

Roentgenographic examination of the chest revealed a moderate amount of cardiac enlargement with minimal pulmonary congestion.

The electrocardiogram below was taken shortly after admission at about the time she experienced two more attacks of syncope. In spite of increasingly large doses of Pronestyl and quinidine, she continued to have episodes of loss of consciousness with generalized convulsions, cyanosis, and a slow irregular radial pulse. As these attacks increased in frequency and duration (occurring as often as every few minutes, lasting from 1 to 5 minutes or so) the patient showed effects of cerebral anoxia, became semi-comatose, and expired five days following her admission to the hospital.

Electrocardiogram

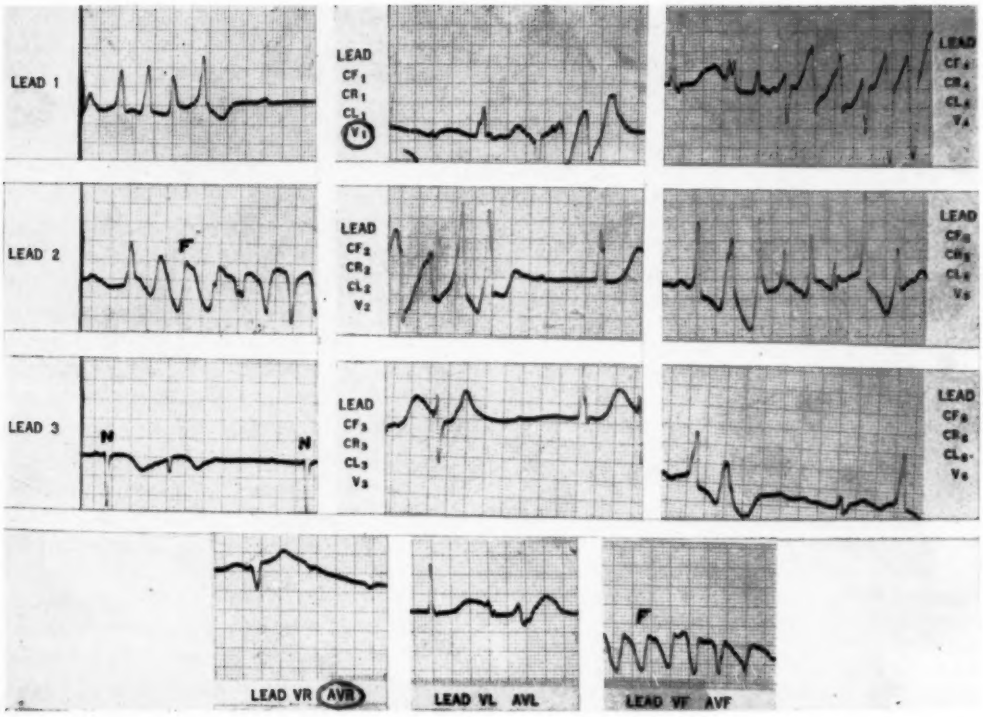
The remarkable electrocardiogram below is one of several taken during this patient's hospital admission. There is a complete dissociation of atrial and ventricular activity, the P waves occurring at a regular rate of about 95. On long strips of tracing the basic ventricular rhythm is seen to be the extremely slow beats, probably arising in the A-V node, labeled "N" in lead 3. Numerous ectopic beats arising from several foci in the ventricles are also evident, and these occur in frequent runs of ventricular tachycardia such as that recorded in lead 1. At times the QRS complexes are completely obliterated by irregular, high, wide deflections of ventricular fibrillation, two paroxysms of which (designated "F") are clearly discernible in leads 2 and aVf of this record.

Discussion

Ventricular fibrillation is rarely recorded electrocardiographically except as a terminal phase of cardiac activity at the time of death. For many years it was generally believed that the onset of ventricular fibrillation was attended by an almost immediately fatal outcome. Recent clinical experience, and particularly the rather frequent observation of this disorder during cardiac surgery, has proven that this is not necessarily so. There are now quite a number of cases on record in which paroxysms of ventricular fibrillation have reverted to normal ventricular activity either spontaneously or following administration of potassium or the application of various types of electrical de-fibrillators. This patient lived three days after the above ECG was recorded; her history suggests that she may have had recurrent paroxysms for some time prior to admission to the hospital. Included in her several electrocardiograms are manifestations of all stages of hyper-irritability of the ventricular myocardium, from occasional ectopic beats to ventricular tachycardia to ventricular fibrillation. In the chaotic uncoordinated activity of the myocardium during these paroxysms virtually no blood is pumped into the circulation. The net result is the same as in the asystole of complete heart block with cerebral

*One of a series of clinical-electrocardiographic correlations. Purpose of this series is the presentation, not of necessarily rare or unusual ECGs, but of those which illustrate basic electrocardiographic principles or which contribute prominently to the clinical diagnosis.

**Asst. Professor of Medicine, Medical College of S. C. From the Department of Medicine, Medical College of S. C., and the Roper and Medical College Hospitals, Charleston, S. C.



anemia and syncope (Stokes-Adams syndrome). Presumably, lesser reactions such as dizzy spells may result from more momentary interruption of the circulation.

As a primary cause of death, ventricular fibrillation doubtless occurs more frequently than is recognized. It is known to occur in electrocution, in trauma to the heart, in coronary occlusion, and is said to result sometimes from massive doses of digitalis or quinidine. Ventricular tachycardia and perhaps ventricular fibrillation may ensue in pheochromocytoma, producing a decrease rather than the expected increase of blood pressure in attacks. During surgical procedures on the heart, and rarely during cardiac catheterization, fibrillation of the ventricular myocardium may appear as an often fatal complication. The prevention of this complication is the rationale for preoperative administration of quinidine in these cases, and for the often routine use of quinidine in the acute stages of myocardial infarction. Coronary disease would seem the most likely etiological factor in this case, although no autopsy was obtained.

Cardiac arrhythmias are a major consideration in the differential diagnosis in syncope and convulsions and may go undetected unless the patient can be observed during an attack.

Editorials

VA DEAF TO HOOVER COMMISSION

Hoover Commission recommendations designed to save money and promote efficiency within the Veterans Administration's medical program have been rejected by that agency. A 100-page report to the House Veterans Affairs Committee by VA turns down all of the major commission proposals in the health fields, criticizes others without taking a definite position, and supports only a few. The recommendations were made public February 28, 1955, after the Hoover Commission (Commission on the Organization of the Executive Branch) had spent almost two years studying VA and other departments and agencies. Here is the way VA reacted to specific major proposals:

1. The commission's proposal for creation of a Federal Advisory Council of Health, that would replace the Rusk Committee and advise the President on all federal medical matters, including hospital construction, personnel training and military medical requirements. While admitting that there "is much to be said in favor" of such a council, VA warns that it should have limited power. "It is of paramount importance, "says VA, "that any such body should operate only in an advisory capacity, without any prerogative to direct agency action. . ."

2. The commission recommendation that VA "consider" closing certain specified hospitals, that all surplus hospitals" be closed immediately, "that all construction authorizations be rescinded unless a contract has been signed or work started, and that VA close out all hospitals that "can no longer be operated effectively and economically."

VA stated that it was "by no means prepared to endorse the wholesale closings recommended by the task force." It said that a curtailment of beds would be virtually impossible, unless accompanied by a "well-defined change in existing legislative policy" regarding right of non-service-connected cases to hospitalization. VA argued, too, that closings would be inadvisable without the approval of Congress.

3. The commission recommendation that a veteran's statement of inability to pay for non-service-connected treatment be subject to verification, and VA be authorized to collect in the future when and if the patient is able to pay. VA flatly opposed this. It advanced several arguments. First, the agency said that such a policy would require changes in the law. It noted that in only 200 non-service cases out of half a million hospitalized was the veteran found to be able to pay. Also, maintained the VA, Congress had made plain that it approved of the present policy on admission of non-service-connected cases and that it did not favor a change. The agency said it would be inconsistent to require an "in need" oath, subject to investigation, and then attempt to collect later. Its point was that a man able to pay would not be admitted as a non-service-connected case in the first place.

The Commission had suggested that payment might be obtained from health insurance companies. On this VA commented: The Commission's position "is rather misleading and unrealistic," inasmuch as the companies have "very largely" rewritten their policies to exclude reimbursement for hospital care at public expense. "It is beyond the power of Congress," the VA continued, "to require change of these insurance policies on this matter or to prohibit private persons from entering into such contracts."

In its report VA commented on a number of Hoover Commission suggestions not directed particularly at this agency, such as provision of health insurance for military dependents and U. S. civilian workers, both of which proposals VA indorsed.

CHIROPODY

The average physician probably knows less

of the profession of chiropody than he does of any other branch of medicine. A chiropodist (or podiatrist), is a specialist in the treatment of diseases of the feet. The chiropodist treats ailments of the human foot by means of local, mechanical, physical, surgical and medical methods. Chiropody does not use or teach cultist methods, or think other than as a definite unit of medically trained students with known obligations toward the parent body of medicine.

The educational requirements of a chiropodist closely parallel those of medicine and dentistry. His education consists of a pre-chiropody course followed by four years at one of the six schools of chiropody and foot surgery accredited by the National Association of Chiropodists. The curriculum consists of 4,400 hours or more in class rooms, laboratories and clinics and includes anatomy, physiology, embryology, histology, pathology, bacteriology, bio-chemistry, neurology, dermatology, physical therapy, roentgenology, orthopedics, podo-pediatrics, surgery, materia medica, therapeutics, physical diagnosis, didactic and clinical chiropody. In addition, several states require a one year internship in a foot clinic or hospital after graduation before an examination for a license may be taken. All six chiropody colleges grant a degree of Doctor of Surgical Chiropody (D.S.C.) except one which grants the degree of Doctor of Podiatry (Pod. D.). The degrees are synonymous.

Some chiropody colleges are associated with universities. In many instances, the members of the faculty teach at both the medical and chiropody schools. Each chiropody school has a large foot clinic where the students receive practical clinical instruction and experience. In some schools, as part of this training, externships are served at approved hospitals.

The first great step in America toward the recognition of chiropody as a special branch of the organized profession of medicine, may be said to have occurred in 1939, when the Judicial Council of the American Medical Association ruled that the practice of chiropody is not a cult practice. "Chiropody," the Council stated, "is rather a practice ancillary—a handmaiden—to medical practice in a limited field considered not important enough for a doctor of medicine to attend and therefore too often neglected. General opinion seems to be that chiropody fairly well satisfies a gap that the (medical) profession has failed to fill." The Council also ruled that teaching by members of the American Medical Association in recognized schools of chiropody is not unethical. The United States Navy has accorded chiropody due recognition by granting commissions to its practitioners, and it is expected that the same recognition will soon be accorded by the Army.

The value of the chiropodist is evident in the various outstanding clinics throughout the country, in the New England Deaconess Hospitol, Mayo Clinic, Mt. Sinai Hospital, New York Emergency Hospital, Georgetown University Hospital, Washington, D. C., Grave-New Haven Community Hospital, New Haven, Conn., Cedars of Lebanon Hospital, Los Angeles, and in numerous other institutions.

Charles Mayo, M. D. put the problem succinctly in these words: "I am convinced that doctors of medicine, myself included, have paid too little attention to the feet in their relationship to the condition of a patient and have made too cursory an examination of the feet, considering their importance to people with the beating they take and their potentiality as a source of discomfort and comfort. The doctor of medicine should be capable of recognizing foot ailments. When care and treatment of such conditions are necessary, he should refer the patient to those accredited and skilled in that specialty when such consultation is available."

Reuben Friedman, M. D., clinical professor of dermatology, Temple University School of Medicine, put it another way, "It has been estimated", he said, "that disorders of the feet occur in 80 per cent of women and in 60 per cent of men. Few practitioners of the healing arts are as familiar with the almost infinite number and variety, as well as the significance, of the signs and symptoms and diseases of the pedal extremities as is the chiropodist. Once he is engaged in active practice, the

chiropodist sees more patients suffering from one form or another of diseases of the feet than does any practitioner of medicine."

The chiropodist renders an especially valuable service to the diabetic patient and to the one with peripheral vascular disease. In fact, many hospitals have instituted chiropody services for their diabetic, peripheral vascular and orthopedic clinics.

In the management of the diabetic and in peripheral vascular disease, it has been demonstrated that prophylactic foot care means fewer infections. In one study, it was found that scrupulous podiatric prophylactic care improved the prognosis of foot infections 77 per cent. Joslin has emphasized the necessity of chiropody care in all diabetic and in peripheral vascular patients. Gray states unequivocally that in diabetics, the incidence of gangrene and subsequent amputations has been greatly reduced as a result of podiatric care.

The modern chiropodist fills a definite need in medical care and is well fitted to assume the responsibilities of caring for the nation's feet. Chiropody needs and seeks the cooperation of medicine in promoting the foot health of the American people.

READING IMPROVEMENT PROGRAMS

Much ado has lately been made over the matter of reading difficulties and what should be done about it. New methods of teaching and old methods have their ardent advocates. The truth of the matter is that there is something good in both the old and the new, and it is obvious that what is good should be selected from each. It is also true that no one method of teaching is the best method for every individual. This is not to say that I am "straddling the fence". On the contrary, my ideas are quite clear on the subject. Actually, the matter of individual attention, no matter what the kind or origin, accomplishes a laudable end.

There is a reading improvement program at our State University. I certainly have no objection to it. Indeed, I am all for it. Nor do I particularly care who is in charge or what methods he uses so long as he is honest. I have made a considerable study of reading difficulties and know something, though not enough, of the subject. The *one and only* point which *must* be put over is this: the reading improvement program must not be used as a means of persuading people to purchase glasses. The person having trouble with reading is rarely in need of glasses to correct it. Nor are all kinds of exercises necessary. Speed in reading is attained in large measure by application, practice, and a will to improve. One must not overemphasize the importance of a course in reading improvement. Training and teaching in reading is not confined to a college course nor to any kind of limited course, but is a lifetime project.

Meticulous and constant supervision of this reading improvement program must be maintained as a protection for the students and the public against unscrupulous and mercenary persons.

J. W. Jervey, Jr., M. D.

REPORT OF DELEGATE TO A. M. A. JUNE 1955

On Saturday, June 4, 1955, Civil Defense officials gave an interested audience of possibly 100-150 doctors a glimpse of what would happen if an H bomb were dropped within 200 or 300 miles of our home. With the development of each more powerful bomb methods and time of evacuation must be changed. For example, a bomb the size of the one dropped on Bikini would leave a crater one mile in diameter and about two hundred feet deep. Casualties from fall out would occur in an area varying with the direction and force of the wind currents 20,000 feet and on up. The average is usually considered about 7,000 square miles. Wind currents over four miles up (and the H bomb mushroom may go up to between 16 and 20 miles) are variable not only from day to day but from hour to hour. A competent meteorologist must be one of the team to advise about which way to go to avoid the fall out. The closer one is to the bomb burst, of course, the larger and hence the greater the danger from fall out.

The usual conception of the care of casualties has changed since Nagasaki. The professor of surgery there was about twenty miles in the country when the blast occurred. He immediately went into the heart of the city and worked all night. Nearly all his patients were dead by morning. He changed his location and went to the periphery of the destroyed area and seemed to accomplish much more. The doctor who first sees a casualty must decide whether he should

receive attention there or be sent back further for more careful work. The best man for this job is one who had that type work during the war. The more experienced surgeon must be further back to do whatever he can. At the first station—anoxia, shock, bleeding, and fractures should be controlled as much as possible. It is not practical to tie up a surgical team for an hour operation when 500 casualties are waiting to be seen, where a tracheotomy may save a life. Col. Shaffer spoke out against the use of a tourniquet except when that member is to be amputated, and that only as a last resort. Crushed hands and feet are very common and they should never be amputated at the front station. A week—ten days or two weeks may pass before major restorative surgery can be done. Pressure bandages, tracheotomies, pneumothoraces, shock, heart tamponade must be cared for at the front and the others sent on back.

The supplies called for and the complexities of caring for only 250 casualties are staggering. The Harris County Medical Society, of Houston, tried it. Each position was four deep in replacements—they drove 90 miles with all equipment and simulated care for 250 casualties. Communication and sufficient lighting were the chief lack. In case a bomb or bombs fall on the U. S. the Civil Defense authorities are figuring on 5,000,000 casualties. In or near a bombed area there will be no electricity except battery or locally generated, no water or contaminated water, no sewage disposal, no gas or telephone.

The Civil Defense officials were cheered by the large turnout of physicians. The Council of the South Carolina Medical Association has urged and so have the defense officials, that the doctors in South Carolina take the lead in their community to see to it that at least the population is informed of the possible dangers, that the doctors are organized and trained, not only to care for casualties that might occur in our state, but casualties that might come to us from other states. Each county medical society in the state should organize along practical lines of service because we may not have much if any warning.

Senator Kefauver told us that there are intercontinental missles that travel at 2,000 miles an hour for which there is little or no defense. No military man feels that all enemy planes could possibly be stopped before they reach their target. England as small as she is spends 4 times our 50 million dollars that we spend on Civil Defense.

California is perhaps better prepared and informed than any other state. They have a number of trucks equipped for communication and power as well as hospital auxiliaries. They have trained decontamination squads with all necessary equipment. The October issue of the California State Medical Journal was composed entirely of articles on Civil Defense. South Carolina is not as good a target as California but at least we should know something about it.

This problem is one for each community, each block—this is a buddy-buddy arrangement. Hysteria will be widespread. The doctors of South Carolina should get together locally, team all they can, and teach as much of the population as they can about this threat over which we have no control.

After the first day, and the meeting on Civil Defense, the regular program was followed.

A number of important topics were disposed of in the House of Delegates. In a great many states, especially in the west, osteopathy is widely practiced. In a number of communities osteopaths are the only practitioners of the healing arts available. In some localities osteopathic hospitals are the only ones for miles. There has been a feeling among some osteopaths and physicians that the training of each group is similar. A committee from the A. M. A. was allowed to go to all but one osteopathic schools (one of their best) to determine how nearly osteopaths receive the same training as physicians. This was done and two reports, a majority, and a minority, were given. The House of Delegates voted to accept the minority report which was to the effect that the study committee be thanked for its diligent work and discontinued, and that until such time as the osteopathic concept" be discontinued in the catalogue and in the teaching in osteopathic schools that the A. M. A. not approve physicians teaching in osteopathic schools.

Another topic which drew long and loud argument in the reference committee was the one on the dispensing of glasses by an ophthalmalogist and the owning of a drug store. The committee reported that in its opinion it is impossible for a code of ethics to be specific. It must state broad and general policies. The code of ethics does not represent law but a moral code. The A. M. A. does not have, and doesn't desire to have, police force to carry out the principles of the code of ethics. The reference committee suggested and the House of Delegates approve the following:

Dispensing of Drugs and Appliances by Physicians Sec. 8—It is not unethical for a physician to prescribe or supply drugs, remedies, or appliances as long as there is no exploitation of the patient".

The interpretation of "exploitation" determines what our ophthalmologist friends are justified in charging their patients for glasses fitted in their office.

To the thoughtful physician the section 8 quoted above is far from what most of us hoped for, but under the circumstances possibly the best possible solution.

The reference committee in its report emphasized again section 6, chapter I which reads, "The ethical physician, engaged in the practice of medicine, limits the sources of his income received from professional activities to services rendered the patient____" The dispensing of glasses and drugs places a great responsibility on individual physicians. Each must be governed by his conscience.

There was a great deal of disapproval of the

functioning of the Hospital Accreditation Board. The speaker of the House of Delegates was requested to appoint a committee of seven members to study and revise the functions of this Board and report at the next annual meeting. No member of the committee could be a member of the Council on Medical Education and Hospitals or the joint committee on the accreditation of hospitals. All physicians and hospitals which have complaints or suggestions should pass them on to this committee.

On polio vaccine the House of Delegates urged that it be distributed according to the usual proceedure with new drugs. No department of the Federal Government should buy or distribute vaccine except for indigent patients. An expression of gratitude and admiration for his scientific achievement was sent to Dr. Jonas Salk.

The House of Delegates also:

Commended the "Medic" television programs.

Reaffirmed its previous recommendation that the United States withdraw from the International Labor Organization.

Approved the Headquarters Survey Report which included the statement that "the only public relations program of any permanent value is the private and public relations of the individual doctor". The future of medical practice in the U. S. depends upon how you and I conduct ourselves in our offices and in our community.

Tuesday evening was the inaugural program and was broadcast nation-wide over the ABC radio network. Dr. Hess, in his inaugural address, said that "unless we are willing to give of ourselves and our faith, our science will avail us little". Dr. Norman Vincent Peale, eminent clergyman, pointed out in his usual excellent fashion that "the drawing together of medicine and religion is a step in helping man toward proper use of his God-given potentials and qualifications."

The more important election of officers were: Dr. Dwight H. Murray, Napa, Calif., a general practitioner, as president-elect; Dr. Millard D. Hill, Raleigh, N. C., vice-president; Dr. J. J. Moore, Chicago, treasurer; Dr. E. Vincent Askey, Los Angeles, speaker of the House of Delegates; and Dr. Louis M. Orr, Orlando, Fla., vice-speaker.

Dr. Gunnar Gundersen, La Crosse, Wis., was named Chairman of the Board of Trustees to succeed Dr. Murray. Dr. James R. Reuling, former speaker of the house, was elected to fill Dr. Murray's term on the Board. Re-elected as Trustees were: Dr. L. W. Larson, Bismarch, N. D., and T. P. Murdock, Meriden, Conn.

It should be reiterated often that the House of Delegates is the policy forming body of the A.M.A. The House is advised by all the different councils and the headquarters staff. They are the great statistical and fact finding bodies. The work they do is not often publicised but it is enormous. The Board of Trustees carry out the policies and directives of the House. The councils do the same thing because they not only seek and keep facts and information but carry out the policies of the A.M.A. If any doctor or group of doctors wishes a change in any policy of the A.M.A. he should begin with a resolution in his county society, then state association, and finally the A.M.A. When his resolution is brought up for discussion in a reference committee of the A.M.A. he has the right to be there and discuss it—indeed he is urged to do so. His resolution may be defeated, altered, or approved depending upon the majority vote of the House of Delegates. Not every recommendation of a reference committee is approved by the House of Delegates though generally this is true. No doctor should ever say or feel that the President, Secretary, Board of Trustees, or anyone is running the A.M.A. The responsibility of the Association belongs to every individual doctor who is a member. It's your and my and every doctor's Association.

REPORT ON CLINICAL MEETING OF AMERICAN MEDICAL ASSOCIATION BOSTON, MASSACHUSETTS November 28 — December 2, 1955

I found Boston quite cold on the outside but warm on the inside. The meeting was opened with an invocation by Dr. Edwin P. Booth, who was a close friend of the new Speaker of the House, Dr. E. Vincent Askey of California. The meeting was given impetus by the Speaker and Vice-Speaker, Dr. Louis M. Orr of Florida.

As usual there were any number of reports and resolutions—the reports from the various Councils and the Board of Trustees.

The President, Elmer Hess, gave an excellent talk, emphasizing the fact that the duty of the doctors was to take care of the sick folks. He thought there was too much complacency. We were informed that the various Councils now had legal assistance which was being utilized to our advantage. The cooperation of the bar members and the medical societies, particularly in regard to medical jurisprudence, was now being advocated, and in certain sections of the United States definite meetings are being held and progress is being made.

Stress was placed upon the Councils, especially medical education and hospitals. Local conditions control the doctors in association with the hospitals and there certainly should be cooperation between anesthesiologists, radiologists, pathologists, and the hospitals. Dr. Hess said ". . . the welfare of patients supersedes everything else."

The problem of the medical school faculty members engaging in private practice of medicine as a means of supplementing income is a situation that calls for close scrutiny and one that must be worked out satisfactorily, both to the practicing physicians and the medical schools.

The Doctor Draft Law is going to continue to exist and there is some cooperation between those in charge in the Pentagon and the American Medical Association.

HR 7225 was discussed and Dr. Hess gave the reasons why the A.M.A. was opposed to the measure. It is another instance of getting something for nothing, letting somebody who does not deserve spend your money.

Dr. E. Roger Samuel of Mt. Carmel, Pennsylvania, was selected as General Practitioner of the Year. I had the pleasure of meeting him and found him a very astute and delightful gentleman.

A complete review of the various measures has been forwarded to the Delegates.

I attended the Pediatric Section of the Clinical Meeting on Wednesday, December 30. There were some interesting discussions.

It was a large meeting and well attended with several thousand doctors present.

William Weston, Jr., M. D.

BLUE CROSS . . . BLUE SHIELD

BLUE CROSS — BLUE SHIELD

There is an ever increasing crescendo of complaint in regard to the high costs of hospital care. The size of hospital bills provides seemingly firm reason for these complaints. However, a simple summation of hospital bills gives the amounts paid for hospital care without revealing the important reasons why the costs are so high. Until the reasons are understood and steps taken to correct them, there will be no decrease in the amounts paid to hospitals.

Perhaps, the most frequent explanation given for increasing hospital costs have to do with increasing food costs, larger payrolls for hospital personnel, and expanded and increased costs of therapeutic and diagnostic facilities. There has been a tremendous increase in costs in each of these categories, and that increase is reflected in the average per diem costs of hospital care. However, to argue that increasing costs in these several categories is the chief factor in increasing hospital costs, overall, is faulty. It is rendered so by the fact that the average stay in hospital, either figured on the basis of total admissions or figured on the basis of different categories of illness treated in hospitals, has been so shortened as to largely absorb or neutralize the increased per diem costs. To ascertain the true reason for the overall increase in amounts paid for hospital care, one must look for other causes.

Such other causes are not unrecognized. Much is being written about them, studies have been made and reports prepared. Blue Cross and commercial carriers have long recognized them.

Dr. Kenneth B. Babcock, Director, Joint Commission on Accreditation of Hospitals, published an article in the *Journal of The Tennessee State Medical Association* in June which was condensed in *Current Medical Digest* in which he discussed some of the other causes of increased hospital costs. He states, "Thoughtful medical men and hospital administrators as well as the executives of hospital prepayment plans, are terrifically concerned over the rising rate of contract utilization as reflected in days of service rendered to contract holders." He calls attention to the fact that prepayment insurance carriers and especially Blue Cross, prepare their contracts to cover health care of the sick who need hospital treatment. These contracts are insurance against the costs of illness and injury necessitating hospitalization. They are not designed to offer full medical coverage.

Dr. Babcock divides the blame for improper utilization into four categories: that of the prepayment plans themselves, that of the patient, that of the hospital and that of the doctor.

Overzealous selling methods and misleading claims of benefits offered sometimes give rise to expectations of benefits which are not provided by the contract. Our own Blue Cross and Blue Shield plans have been guilty of this at times—not, as I believe, through intent, but rather because of careless copywriting.

The element of human psychology enters into the second category. The thought, "I'm paying for hospitalization insurance, I ought to use it," gives rise to tremendous pressure upon the doctor to admit cases of minor illness, those for x-ray, laboratory and other diagnostic procedures or for general physical evaluation. Although these people were sold sickness and injury insurance necessitating hospital care, they expect and demand total medical coverage. Unfortunately, experience in our claims department shows that far too often the doctor himself suggests hospitalization for diagnostic work-up, and when full benefits are denied, he writes in supporting the patient's claim for such benefits. Further, it is surprising how often in these cases, the doctor throws the entire book of orders at the patient, without any thought of indications and selection of examinations. In attempting to evaluate questionable cases as to coverage, we seek answers to these questions by study of the diagnosis and the recorded history of the present illness, namely: did the patient require hospital care at the time of admission, were the diagnostic examinations a part of and consistent with the illness for which he was hospitalized, and could the diagnostic examinations have been done equally and safely and ac-

curately with the patient an out-patient?

As a further means of correcting the patient's demand for unnecessary hospitalization, Dr. Babcock stated that Blue Cross and insurance companies "must explore new fields and come up with answers and policies paying for hospital out-patient visits, annual physical or diagnostic examinations and liberalization of payment for office procedures." He finally advocates an educational program to drive home the reality, "Abuse your insurance and watch your premiums go up."

The role of the hospital in encouraging excess utilization as seen by Dr. Babcock is first in failing to enforce a stop order for antibiotics and other expensive drugs, and delays in executing and reporting on procedures ordered.

With regard to the role of physicians in encouraging or allowing excess utilization, Dr. Babcock says, "The greatest single source of abuse of insurance or Blue Cross is the admission for diagnosis only." He calls attention to the fact that the tests and examinations in a case of check-up examination make it the most expensive form of hospitalization. He believes to cure this evil, all companies will have to refuse payment on such cases and the doctor has to advise the patient that such admissions are not included in his coverage.

Excess utilization, which has been discussed, is the chief factor in the high costs of hospital care, when considered on a group rather than an individual basis. It can be reduced by understanding cooperation by the patient, the hospital and the doctor. A failure to cooperate can result only in raising the costs of insurance whether it be by commercial companies or by Blue Cross. The costs for significant coverage is already too high for many of our people, and particularly those people for whom Blue Cross and Blue Shield were organized. The alternative to prepaid voluntary sickness and injury insurance is compulsory government insurance.

Jan. 6, 1956 J. Decherd Guess

ROPER HOSPITAL AND THE MEDICAL COLLEGE HOSPITAL

William H. Prioleau, M. D.**
Charleston, South Carolina

Four years ago the Medical Society of South Carolina was reorganized so that it could better carry out the purposes of its trusts and endowments as to providing medical facilities for Charleston. At that time problems were anticipated and solutions offered. We are now faced with those problems, made worse by the passage of time, and we have no assurance that a reasonably satisfactory solution can be found. The Medical College Hospital is now open. It is taking over College functions heretofore performed by Roper, and very important to Roper from a standpoint of accreditation. Roper is losing federal and state agency cases, so necessary in teaching and residency training. It is losing the patients of the full time faculty and can expect to lose an undetermined number of patients of the part time faculty. To the College Hospital it is losing personnel in all fields due to more attractive working conditions; among those remaining there is unrest as to the salary scale and the security of their jobs. In addition the county is trying to reduce the amount spent for the care of the indigent.

Roper is not prepared for these drastic changes. This is due in great part to the fact that the lay public and the medical profession in general have been under the impression that the Medical College Hospital would take care of all of the needs of the community. Some county officials saw it as a ready solution to the care of the indigent. Warnings have been uttered from time to time but little interest could be aroused. Only recently has there been some indication of realization by the public that the Medical College Hospital will not fill the needs of the community. For the first time in a number of years Charleston has priority in obtaining Hill-Burton funds for hospital construction.

Roper is meeting the situation by having work not essentially of a nursing nature done by secretaries, aides and assistants. It is revising salary scales. It is closing some wards, and combining services and functions where possible. These last measures are not economically sound and are not conducive to satisfactory professional work. They are only temporary makeshifts.

While the Roper Main Building has been outmoded for many years it has been possible to operate it satisfactorily on account of being able to fill it to capacity and to obtain staff personnel. Now with the loss of support from the state agency patients the cost of care of the county indigent cases is steadily mounting. The difficulty of staffing is acute and no relief is in sight. It is doubtful how long the Main Building can be kept open for the care of the county indigent and the few remaining service cases. This building forms the main connecting link with the Medical College as it houses the patients of chief value in teaching and residency training. Closing it would mean a serious loss to Roper from an accreditation standpoint.

The importance of Charleston County indigent patients in the teaching program of the Medical College cannot be over-emphasized. If they are not available through Roper under conditions satisfactory for teaching, it can be assumed that the Medical College will gain access to them in some other manner. The Medical College could not suffer such loss of teaching beds, particularly of this type, as it was mainly on account of the need of additional teaching beds that the Medical College Hospital was built.

*Medical Society of South Carolina Annual Meeting, November 17, 1955.

**Retiring President, Medical Society of South Carolina and President-Elect, South Carolina Medical Association.

In order for Roper to function satisfactorily as a community hospital there is needed an addition to the Private Pavilion to house the services now in the Main Building and facilities for patients of colored physicians. This would promote more efficient administration, obviate unnecessary duplication in personnel and equipment, and raise the standard of the professional work. Of greatest importance, it would permit caring for the county indigent cases in a satisfactory manner, thus making it possible for Roper to continue to be a teaching hospital closely affiliated with the Medical College.

Though most essential, new construction alone would not assure successful operation. In the final analysis the policy of the Medical College Hospital will determine whether Roper will be able to operate as a fully accredited hospital.

In a recent publication of its operational plan, it is stated that charges at the Medical College Hospital will be comparable to those of other hospitals in the area. Such a fee schedule is made possible by state subsidy. Hospitals dependent mainly upon income from patients cannot compete with it either in services to patients or salaries to personnel. Some restrictions are necessary if these hospitals are to continue to operate.

In its admissions policy it is noted that the only stipulation is that the patient be referred by a physician or recognized agency. The term referred is subject to various interpretations; heretofore in this locality it has been used very loosely. Admission to the Medical College Hospital should be only upon a basis of medical needs. Especial care should be taken not to admit patients who could be satisfactorily treated in a community or private hospital in their vicinity. Part time faculty members should be particularly careful not to abuse the privileges of their College position and seek admission of their patients as a means of currying personal favor and gaining professional prestige. As the Medical College Hospital will be limited to referred cases, mostly of the problem type, the Roper Hospital should supply for teaching purposes cases of a more general nature.

In the Medical College Hospital the state is making an entrance into the private practice of medicine through the faculty of the Medical College. It is introducing into the state the ideology of fulltime practice. By many institutions this is considered desirable from a standpoint of teaching. The full time faculty will constitute the core of the hospital staff. The part time faculty will cover the subspecialties and will do some work in the major departments as long as it is mutually advantageous to both parties.

In brief the state is entering the private practice of medicine through a form of professional control of patients and subsidy of hospital costs. These deviations from the generally accepted principles of medical practice are justified in the cause of medical education, the high cost of which could not be met other than by the state. As long as they are properly restricted there should be no cause for concern. In its efforts to improve medical education in the state, the Medical College Hospital should have the full support of the medical profession. As it is in the developmental stage generous allowances must be made. Modifications of its policy will be necessary and should be accomplished quietly and with dignity.

The critical period for Roper is during the first few years of the opening of the Medical College Hospital rather than later when it is firmly established and can adhere to a strict referral policy. Political pressure beyond the control of and not desired by the College may be applied to make it relax its admissions policy so as to fill its beds and reduce the operating deficit. If adhering to a strict admissions policy results in a slow opening, the state should bear the cost of hospital maintenance as well as that of assuring the full time faculty of an adequate salary. A short-sighted policy aimed at a rapid filling of beds would result in unfair competition with neighboring hospitals and jeopardize the support of the Medical College Hospital by the medical profession of the state. It would destroy the usefulness of the Roper to the College for teaching purposes, and seriously impair its value to the community. A state referral hospital closely affiliated with a highly accredited community hospital would provide an ideal setting for medical education. It would prove advantageous to the Medical College and the community. A full realization of this by the governing bodies of the state, the authorities of the Medical College and the community should lead to its accomplishment.

Somewhere along the line, training in the technique and understanding of physical diagnosis has obviously lagged. Why else would young men who appear to be intelligent and highly educable fail to palpate large livers and spleens? Why would they have difficulty seeing—let alone interpreting—obvious precordial pulsations? Why would they fumble in their attempts at simple neurological examination, or why would so many have no clear idea of what structures make up the silhouette of the heart as it is seen in the x-ray? These deficiencies I have seen, and they represent only a sample. They occur too often and are emphasized when such men may be found well stuffed with milliequivalents and versed in electrocardiography. Those who underrate the high importance of physical examination in the study of patients declare that the laboratory, the x-ray, and our instruments of precision give us highly desirable measurable findings and information, of course, not otherwise obtainable. With this I agree. However, our modern passion for measurement should not blind us to the fact, which expert clinicians can clearly support, that clinical examination has much to contribute and in many instances far more than any test or device now known.

Howard P. Lewis, J.A.M.A., Aug. 20, 1955

PRESIDENT'S PAGE

I recently had the opportunity of meeting with the Maternal Welfare Committee, composed of Dr. Frank Geibel, Chairman, Dr. Hilla Sheriff, Dr. J. P. Booker, Dr. J. S. Garrison, Dr. H. B. Morgan, Dr. H. H. Fouche, Dr. Wesley Snyder, Dr. David Watson, Dr. Lawrence Hester, and Dr. Rowland Zeigler. I learned at firsthand how important the function of this committee can be. The maternal deaths, histories, and reports were carefully studied, conclusions and recommendations made toward reducing maternal death rates. I believe that all who practice obstetrics would find it worthwhile to meet with this committee. The committee proposes to publish some case findings, they should be very valuable and enlightening.

• • • • •

The committee studying the Coroner-Medical-Examiner system consisting of Dr. Strother Pope, Chairman, Dr. Pratt-Thomas, Dr. Harold P. Hope, Dr. Joseph W. McMeans, and Dr. R. F. Zeigler are very interested in their problem. Dr. Pope tells me there is increased public interest as shown by meetings and newspaper comments appearing in Anderson, Conway, Greenville, and Columbia. It has been pointed out that the present coroner system is outdated, that the present law in South Carolina sets forth no prerequisite for the office. Quite a few states have adopted the medical examiner system, and others on a partial basis, during the past year, North Carolina being one of them. Certainly, the coroner's office is important, and proper medical assistance is very necessary in arriving at the cause of many violent, accidental, and sudden deaths.

I wish that space permitted discussion of the activities of other committees. Their cooperation has been most gratifying.

O. B. MAYER

THE SOUTH CAROLINA ACADEMY OF GENERAL PRACTICE

THE SOUTH CAROLINA CHAPTER OF THE AMERICAN ACADEMY OF GENERAL PRACTICE

The American Academy of General Practice has decided that the state units of the academy should be designated as chapters of the national organization. We have adopted the change in our name to the South Carolina Chapter of the American Academy of General Practice.

Charles N. Wyatt, President-elect of S. C. Chapter of the A.A.G.P., has been appointed to the nominating committee of the national organization.

The S. C. Chapter has passed resolutions opposing an extension of the "give-away" provisions of the Social Security Act.. We have advised all of the S. C. members of U. S. Congress of our action.

The S. C. Chapter has voiced opposition to allowing any exhibitor who has made displays at "QUACK" —Naturopaths and "Neckbreakers, etc"—meetings to have exhibitions at medical meetings.

The A.M.A. is fostering the development of "divisions" or departments of general practice in medical colleges and hospitals.

The Eighth Annual Scientific Assembly of the American Academy of General Practice will be held at Washington, D. C., March 19-22. This is only an overnight train ride for most S. C. physicians. These meetings are tailored to the interests and needs of the busy and alert general practitioner. This is an opportunity for all physicians in the state to get a first hand view of the type of organization the American Academy of General Practice is. Make your reservations thru the AAGP Housing Bureau, 1616 K Street, NW, Washington 6, D. C.

CORRESPONDENCE

THE PROPOSED AMENDMENT TO THE OPTOMETRY ACT

A BILL TO AMEND Section 11, Section 56-1072, Code of Laws of South Carolina, 1952, is amended by striking it out and inserting in lieu thereof the following: "The testimony of an optometrist who holds a license to practice and is licensed and registered under the provisions of this Chapter shall be received by any official, board, commission, or other agency of the state or of any of its subdivisions or municipalities as qualified evidence with respect to any matter defined in Section 56-1051 of this Chapter as constituting the practice of optometry and no official, board, commission or other agency of the state, or of its subdivisions or municipalities shall discriminate between the practitioners of optometry and other ocular practitioners."

The South Carolina Society of Ophthalmology and Otolaryngology have met several times and its officers and committees have worked untiringly in an effort to defeat this Bill. This Bill last year got as far as the Committee on Military, Public and Municipal Affairs. There it is to be taken up at the forthcoming meeting of the legislature. We in ophthalmology know that their effort in South Carolina is only a part of the main push by the American Optometric Association on a nationwide basis to allow optometrists to practice medicine.

They have written their own definitions and in various and devious ways tried to cover up their real intent and purposes.

Definition of Optometry:

Medical Dictionary: Optometry is the measurement of visual acuity and fitting of glasses to correct visual defects. A term adopted by opticians (a maker of optical instruments and glasses), who prescribe and fit glasses.

Webster's Dictionary: Optometry is 1. Measurement of the range of vision, also loosely the measurement of other visual powers. 2. Scientific examination of the eye to detect diseases or defects: prescription of correctional lenses or exercises but NOT the use of DRUGS or supplying glasses.

In South Carolina the laws of optometry were at first satisfactory but in the forties "Contact lenses and Orthopetic Training" were added to the Law.

"Complete Eye Care"

The American Society of Optometry, in June 1954, at the annual convention resolved that the field of visual care is in the field of optometry and should be *exclusively* the field of *optometry*.

In Georgia, the summer of 1955, juvenile delinquency and child care were a psychological problem. The radios advertised ""See your optometrist. This may be the cause of the problem."

In New Jersey the House of Representatives had a bill that a school must employ an optometrist for ocular examination. It was MANDATORY that he be employed.

In Pennsylvania they had a bill, which was defeated, extending optometrists medical and surgical privileges. This would deny refractive work for the medical doctors (ophthalmologists).

In Missouri they have bills to permit any licensed optometrist to diagnose and treat ocular diseases.

In Oklahoma, Senate Bill 155, gives optometrists the

right to make all tests and measurements for diseases and diagnosis (of glaucoma and other diseases of the eye.)

An M. D. couldn't check visual acuity then.

In Oklahoma, Bill 777, (in the House) would permit any licensed optometrist to diagnose and treat ocular diseases. It is coming here in South Carolina unless we stop it.

The general practitioner would be in a particularly unfortunate position. The familiar eye test chart in his office would become not only unnecessary but dangerous, for he might be held liable to a fine of $500, thirty days in jail, or both, every time he "practiced optometry" by using the chart to test vision; perhaps in connection with a diagnosis, or possibly for the purpose of completing an insurance examination or a compensation or other form of report.

The ophthalmologist would be in only a slightly better position, for he would be carrying on his refractive work only by virtue of an "exemption" granted him under the state's optometric law; an exemption which would permit him to refract and carry on other "'optometric" functions.

"The people must resort to the polls, not the courts."

The attempted law shows that under such legislative authority, optometry without question seeks to infringe detrimentally both upon general medicine and ophthalmology.

We may lull ourselves in the thought that such a situation would never come to South Carolina, but here it is!

Winthrop College sent out the following letter to their students 1955—two paragraphs of the letter:

"During the week after your physical and after you have registered and received your class schedule, please return to the infirmary and arrange for an appointment to see the doctor and receive a report of your physical. You may at the same time, if you wish, make an appointment with the optometrist for a complete eye examination."

"A further very detailed examination of vision by the local optometrist for those freshmen who have not had a recent refraction by an eye specialist. These examinations are made in the office of the optometrist by the infirmary."

In 1954 an optometrist, without permission, went to a John's Island school and set up refracting and selling glasses—as soon as the Health Officer found out about it, he put a stop to it.

In October 1955 a North Charleston optometrist threatened suit against a public health nurse for referring school children to eye physicians for correction of refractive errors.

In October 1955 a North Charleston optometrist said that a group of Shriners would donate an "orthorator" for school use provided the children with eye defects were referred to optometrists.

September and October 1955 civil employees of the Charleston Naval Base were handed "orthorator" reports with instructions to go to an optometrist for eye examination. A letter signed by every eye physician in Charleston was written to the Commandant of the Sixth Naval District protesting this directive. Copies of this letter were sent to the Surgeon General, U. S. Navy and Congressman of this district. Immediately reply came back that some stenographer had made the mistake.

Columbia University discontinued its school of optometry. Optometry is not a learned profession, it is a technique. Optometrists are technicians, not physicians.

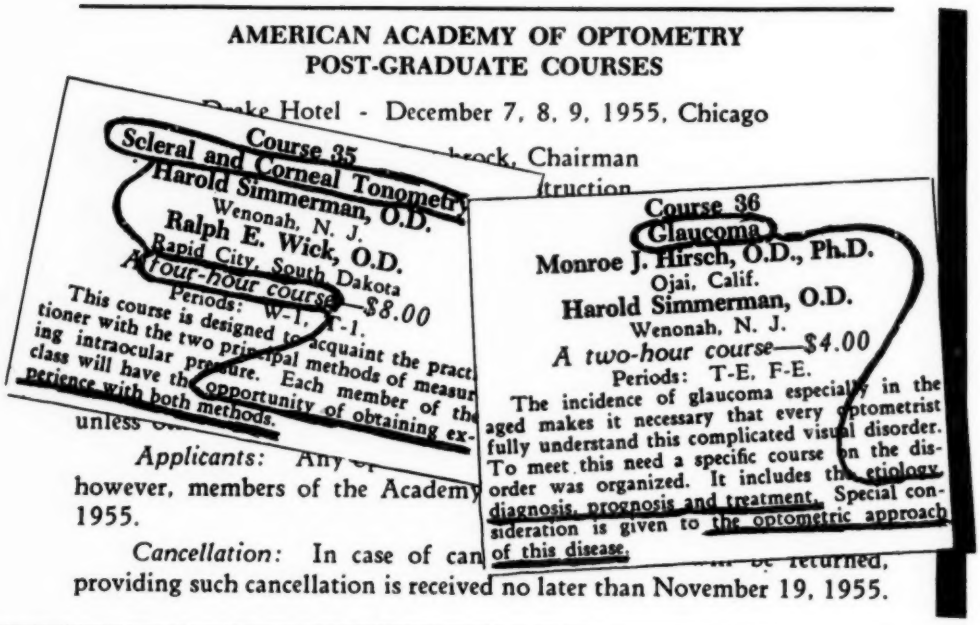
The fact is, of course, that the entire area of eye care is within the province of ophthalmology. A little more than a generation ago when sight-testing opticians set themselves up as "optometrists", they secured legislation to reserve for themselves, alone among laymen, the privilege of refraction. In the legislative declarations reserving this privilege to optometrists, it was necessary to make it unmistakably clear that such restrictions generally on the power to refract, were not intended to apply to the MEDICAL PRACTITIONER TO WHOM REFRACTION AND ALL OTHER ASPECTS OF EYE CARE WERE MATTERS OF UNDISPUTED RIGHT, BASED UPON HIS MEDICAL LICENSE.

Thus, these so-called exemptions actually "GRANTED NOTHING". In fact, they are not even exemptions. They are nothing more or less than "non-applicability clauses", and do no more than recognize an existing situation. And to imply that the medical practitioner now undertakes refraction or any other particular aspect of eye care as the "exempt" practice of optometry, done under optometric sufferance by means—as the resolution states of an exemption "granted ophthalmology, is more than a source of irritation; it is ALSO A WARNING SIGNAL.

It is a "WARNING SIGNAL" because it calls attention to optometry's very obvious projected technique of gathering certain eye care functions solely to itself by the basically simple process of 1. Gaining acceptance of the idea that these functions are optometric. 2. That others perform them solely because they have been specifically "exempted" from the optometric law; so that 3. The right of others to perform these functions may be taken away from them by the relatively simple process of withdrawing the so-called "exemptions" in their favor.

We come back to the basic fact that every technique of eye care is traditionally, properly and legally within the province of medicine, and every declaration to the contrary should be immediately met and answered, as otherwise simply by default optometry may gain acceptance of a concept by which it so clearly seeks to enlarge its own field, at the expense of medicine and medicine's ancillary services.

Optometry itself gives its own specific meaning to the term "ophthalmology" by reaffirming its 1938 statement of policy wherein it had distinguished between



AMERICAN ACADEMY OF OPTOMETRY
POST-GRADUATE COURSES

Drake Hotel - December 7, 8, 9, 1955, Chicago

Course 35
Scleral and Corneal Tonometry
Harold Simmerman, O.D.
Wenonah, N. J.
Ralph E. Wick, O.D.
Rapid City, South Dakota
A four-hour course—$8.00
Periods: W-1, T-1.
This course is designed to acquaint the practitioner with the two principal methods of measuring intraocular pressure. Each member of the class will have the opportunity of obtaining experience with both methods.

Course 36
Glaucoma
Monroe J. Hirsch, O.D., Ph.D.
Ojai, Calif.
Harold Simmerman, O.D.
Wenonah, N. J.
A two-hour course—$4.00
Periods: T-E, F-E.
The incidence of glaucoma especially in the aged makes it necessary that every optometrist fully understand this complicated visual disorder. To meet this need a specific course on the disorder was organized. It includes the etiology, diagnosis, prognosis and treatment. Special consideration is given to the optometric approach of this disease.

Applicants: Any ... however, members of the Academy ... 1955.

Cancellation: In case of can... be returned, providing such cancellation is received no later than November 19, 1955.

"PHYSIOLOGICAL EYE CARE KNOWN AS OPTOMETRY AND SURGICAL EYE CARE KNOWN AS OPHTHALMOLOGY."

In this asserted distinction, optometry placed no PRACTICAL LIMITATIONS UPON ITS OWN BOUNDS, as the word "physiological" REFERS MERELY TO BODILY FUNCTIONS, so that its use can EMBRACE ANY OR ALL OF THESE FUNCTIONS, AND HENCE ANY AND ALL PHASES OF EYE CARE.

The Eye, Ear, Nose and Throat Society has hired the distinguished Mr. William Prioleau, formerly secretary to Mr. Byrnes when he was governor, to look out for us here in Columbia, and to largely represent the EENT Society's first half of the two part plan. He was recommended to us by Senator Richardson and others as the best in his field.

The S. C. Medical Association has become very active against this bill. At a recent meeting of the Council, they asked us to call on them. They appointed Dr. Stokes and Dr. Gressette, two members of the council, to be liaison agents. And our "ever present help in time of trouble" Jack Meadors, has, with the approval of Council, agreed to join the all out fight and to direct that part of the fight which will be the responsibility of the state association—the calling of chairmen of legislative committees of the state society, getting out letters as he has already noteworthy done, advising us which legislators he knows to be against us, etc. This is the second half of the plan!

Mr. Prioleau and Mr. Meadors will head up the two separate teams. Dr. Roderick MacDonald is correlator. Every legislator in South Carolina must be called on and his understanding support gained. It is hoped that every doctor in the state will acquaint his legislator with the incontrovertible facts.

We don't care how many people optometrists fit glasses for, so long as the public is not forced into going to them. We want to examine patients for glasses too.

Ophthalmologists are PERFECTLY WILLING FOR THE TEACHER, SCHOOL NURSE, D.P.W. WORKER, ETC., who have had years of experience in these matters, to send the patient to the man they think best for the patient. The D.P.W. Worker, for instance, knows well which optometrists and ophthalmologists in her territory are capable. We don't want people TRICKED OR COERCED into going to optometrists. The optometrists argue that they simply want to look at the eye-grounds and if pathology is present refer the patient to an ophthalmologist. They used this argument very effectively at the open hearing. They are too poorly trained to realize that the most difficult thing even the best medical doctors have to do is to determine that there is or is not pathology present.

If this bill becomes law it will put people on relief, who with proper eye care, would have useful vision restored. If this bill becomes law, it will represent the return to the education standards of fifty years ago when some medical schools turned out improperly trained doctors. It required tremendous effort to get rid of the second rate medical schools. In effect, we are threatened with their return. For, if students can go to school for five years and graduate (five years being what the BEST optometric schools require) as

Doctors of Optometry—in short—Eye Physicians as far as the public is concerned, IT WILL BE A SAD DAY FOR THE PEOPLE OF SOUTH CAROLINA. South Carolina Law is that school children be examined by a physician. The eyes are just as much a part of the child as his feet, skin, lungs, heart, or any other organ of his body. Optometrists are not physicians, they are technicians.

1. Public Health in South Carolina trains and certifies many women to be midwives. They do a good job in many normal deliveries, but it would be just as silly to give them the same legal standing as obstetricians as to give legalized eye physician status to optometrists.
2. They claim they are only asking to make school examinations, highway examinations, D.P.W. examinations, and that their testimony be accepted in court on a par with that of an eye physician. This is only an opening wedge—a foot in the door. What they really want is what the national association indicates—to practice medicine—to do all the many tests to determine vision. Under their law they have the legal right to use atropine and pilocarpine, very powerful drugs for good or evil in treating iritis and glaucoma. They would have the legal right to do glucose tolerance tests, to study cataracts, to do B.M.R's, spinal taps, electroretinagrams and many other tests.
3. The citizens of our state would be in more danger from them than from the naturopaths.
4. To legislate for this group is to legislate for a minority group that already abuses the power they already have.
5. The South Carolina Eye, Ear, Nose and Throat Society and the Council of the South Carolina Medical Association urges each Medical Doctor in the state to help fight this bill. It is the responsibility of the doctors to protect the people of South Carolina from legalized charlatanism.
6. The passage of any law that would prevent a nurse, teacher, doctor or any other person from advising a patient to go to the doctor who would give him the best examination is grossly wrong. It is the dictator way.
7. It is the duty and responsibility of the medical profession to look after the entire health of our people. Timothy 1 V- VIII: "But if any provide not for his own and specially for those of his own house, he hath denied the faith, and is worse than an infidel."

*Read before The Charleston County Medical Society, December 13, 1955.

Clay W. Evatt, M. D.

NEWS

The American Academy of Obstetrics and Gynecology has announced that James E. Bell Jr., M. D., Sumter, S. C.; Lawrence N. Bellew, M. D., Greenville, S. C. and Bruce Swain, M. D., Anderson, S. C. were inducted into Fellowship in The Academy at the Annual Business Meeting during the Fourth Annual Clinical Meeting of the organization.

The Committee on Grants of The John A. Hartford Foundation, Inc. has awarded a grant to Roper Hospital in the amount of $108,000.00 for the purpose of an evaluation of diagnostic methods and treatment in arterial obliterative diseases. This study, to be done over a period of three years, will be under the direction of Dr. J. Manly Stallworth, associate in the department of surgery at the Medical College and will be carried out in Roper Hospital.

Admissions to the sponsored research and teaching beds will be selected as follows: (1) Cases with arterial obliterative diseases for use as a control or test subjects for the clinical research program; (2) medical indigents having arterial disease, representing cases of a teaching value at either undergraduate or postgraduate (interns and residents) level; (3) other patients upon whom extra hospitalization for research procedures would impose an undue or unfair hardship.

New officers of the Greenville General Hospital Medical Staff are Dr. William Hood, president, to succeed Dr. William Schulze; Dr. Thomas Furman, vice president, and Dr. William DeLoache, secretary.

New officers of the staff of St. Francis Hospital, Greenville have been named. Dr. M. Gordon Howle will succeed Dr. John K. Webb as president. The new vice president is Dr. Sayge H. Anthony, who succeeds Dr. William S. Hawkins. Dr. Lawrence N. Ballew succeeds Dr. Howle as secretary.

Spartanburg County's new Doctor of the Year has been practicing medicine for 46 of his 72 years, and has delivered between 5,000 and 6,000 babies.

He is Dr. D. Herbert Smith, who maintains offices both in Pauline and Spartanburg.

Dr. Smith was named recipient of the honor at the County Medical Society's annual meeting.

Dr. J. E. Lipscomb has been named president-elect of the Greenville County Medical Society. He will take office next year, succeeding Dr. Henry Ross. Other officers are Dr. David P. Reese, vice president; Dr. Tom Whitaker, secretary, and Dr. A. Heide Davis, treasurer.

Dr. Carroll Bowie has been named president of the Anderson County Medical Society to succeed Dr. Henry S. Jordan.

Other new officers are Dr. James C. Belk, vice president; Dr. William Hunter of Clemson, secretary; and Dr. S. H. Huff, treasurer.

Three delegates named to the state convention include Dr. Joe L. Wyman, Dr. R. E. Edmonds, and Dr. Henry Jordan.

Named to the Board of Censors were Dr. J. B. Latimer, Dr. Claude Prevost and Dr. William Wilson Orr.

Dr. Louis G. Llewelyn has recently arrived in Lancaster to assume his duties as Medical Director of The Springs Cotton Mills.

Dr. Llewelyn was engaged in the private practice of medicine in Pocomoke City, Maryland, until recently, at which time he was president-elect of the Maryland Chapter of the Academy of General Practice and president of the Worcester County Medical Society. He is a Fellow of the American Medical Association and a member of the Nu Sigma Nu Medical Fraternity. He received his AB degree from Johns Hopkins University and his MD degree from the University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore, Maryland. He served two years as Medical Officer of the United States Navy Medical Corps. For four years he was Deputy State Health Officer of Maryland State Health Department. He was also Regional Medical Consultant of the National Foundation for Infantile Paralysis, New York.

Dr. Llewelyn does not come to practice medicine actively but to supervise the First Aid Department, Plant Sanitation, Anti-Allergy, Safety and Insurance Programs. However, he will cooperate in any medical staff work affecting the welfare of the employees of The Springs Cotton Mills.

The Florence City Council appointed two men to the city board of health at their monthly meeting in December.

Named to a five-year term was Allen Eagerton, who succeeds R. B. Barham, and Dr. Julian M. Way to a one-year term to fill the unexpired term of the late George A. Brogdon. Dr. L. R. Dixon, Jr. was reappointed chairman.

The new officers of the Columbia Medical Society are: Dr. Rudolph Farmer, vice president; Dr. W. T. Barron, president; Dr. Harold Jervey, secretary; Dr. Charles Crews, treasurer; and Dr. Charles Holmes, editor of the society's publication, The Recorder.

New officers, commission and committee chairman were selected at a recent meeting of the South Carolina Academy of General Practice, as follows: Commission and Committee Chairmen are Drs. I. R. Wilson, Jr., Charleston; J. H. Cutchins, Easley; R. E. Gregory, Greenville; R. W. LaRoche, Camden; T. G. Goldsmith, Greenville; J. E. Hair, Due West; K. K. Shealy, Columbia; Homer M. Eargle, Orangeburg; J. H. Guess, Union; H. E. Jervey, Columbia; J. S. Garrison, Johnston; W. W. King, Batesburg; and W. H. Speissegger, Charleston. Officers are Drs. G. P. Richards, Charleston, vice president; G. W. Price, Spartanburg, board of directors; W. T. Hendrix, Spartanburg, board of directors; C. N. Wyatt, Greenville, president elect; H. W. Mead, Pendleton, president; and H. M. Whitworth, Greenville, secretary-treasurer.

Dr. Eargle, who served as vice president of the Academy for the year ending September 30, 1955, has been reelected for a second term as chairman of the Commission on Education and Medical Coordination.

The Spartanburg County Medical Society elected the following officers for 1956: Dr. William A. Wallace, president; Dr. Robert Ralston, vice president; Dr. John N. Miller, Jr., secretary; and Dr. Harwood Beebe, Jr., treasurer.

Dr. Robert Thompson, formerly stationed at Donaldson Air Force Base, Greenville, has gone to Anderson to do general practice with Dr. James Halford. Dr. Thompson did practice in Texas for a few years after completing his study at Duke University.

The thirty-fifth annual New Year's meeting of the Marlboro County Medical Society was held at Bennettsville January 12, 1956. Dr. Arthur J. Merrill of Atlanta spoke on "Acute Renal Failure".

The Coastal Medical Society held its meeting on December 15, 1955 at Walterboro. The Scientific Program was a paper on "Current Concepts of Hypercholesterolemia" by Dr. Edwin Boyle of the Medical College.

Dr. James L. Walker, of Clinton, and Dr. James Macdonald, formerly of Joanna, announced their association for the practice of general medicine with offices at 99 Hampton Street, and 1 Joanna Square, Joanna.

Doctor Macdonald comes to Clinton from Joanna where he has practiced medicine since July, 1954.

Doctor Walker has practiced at the Hampton street office since September, 1953, when he returned from two years' service with the army. He originally came to Clinton in August, 1950.

Porter F. Crawford, M. D., has announced the opening of an office in Spartanburg for the practice of dermatology.

Dr. Crawford comes there from Burlington, N. C., where he practiced for the past two years. He was formerly with Dr. Howard Steiger in Charlotte, N. C. and received training in dermatology at the Cleveland Clinic in Ohio and at Duke Hospital in Durham, N. C.

He interned at Memorial Hospital in Charlotte. He was a captain in the Army, and served in Panama, Canal Zone. He was certified by the American Board of Dermatology in 1953.

The new officers of the Newberry County Memorial Hospital's medical staff took over their duties on January 1, 1956.

These new officers include: Chief-of-staff, Dr. E. Gordon Able; assistant chief-of-staff. Dr. E. H. Moore; member-at-large, Dr. Von A. Long, and secretary-treasurer, Dr. J. Claude Sease.

Other new officers are: Chief-of-surgery, Dr. Ralph P. Baker; chief, eye, ear, nose and throat, Dr. Robert E. Livingston; chief-of-medicine, Dr. V. W. Rinehart; chief-of-pediatrics, Dr. C. A. Dufford, Jr.; chief-of-obstetrics, Dr. Elbert J. Dickert, and chief-of-laboratory, Dr. Foster N. Martin.

Dr. William B. Gamble, Jr. has opened an office for the practice of pediatrics at 16 Windermere Boulevard in Charleston, S. C.

He will be associated with Dr. Walton L. Ector.

Dr. Gamble is a graduate of the University of South Carolina and the Medical College of South Carolina. He completed his internship at Roper Hospital in 1949 and was in general practice in Enoree for two years prior to entering the Army Medical Corps.

He returned to Roper in 1953 as an assistant resident in pediatrics and served in that capacity until June of last year when he became a resident and teaching fellow at the hospital and at the Medical College.

Dr. J. W. Bell, chairman of the Greenwood County Board of Health will serve as administrative director of the County Public Health Department until a new director is named.

Dr. M. J. Boggs, Jr., county health department director who had been on leave of absence since September, has resigned the post and Dr. Bell was asked to serve temporarily by the County and State Boards of Health.

Dr. Frank B. Lee of Saunders Memorial Hospital of Florence said today he plans to use the $34,300 Ford Foundation grant to finance the erection of a 35-bed wing to the present building. The hospital now has 77 beds.

Dr. Leo E. Kirven has recently assumed the duties of an assistant physician, Negro Men's service, State Park Division, of the South Carolina State Hospital, Dr. William S. Hall, hospital superintendent, has announced.

A native of Pinewood, Dr. Kirven is a graduate of Clemson College, and received his medical degree from the Medical College of South Carolina, Charleston, in 1954. His medical fraternity is Phi Rho Sigma.

He was a junior intern at the State Hospital in the summer of 1953, at which time he was a rising senior at the Medical College.

Following graduation from the Medical College, Dr. Kirven served an internship in the Columbia Hospital. He was engaged in private practice in Summerton, prior to joining the medical staff of the South Carolina State Hospital.

Dr. James Y. Bryson, who has recently been doing medical work at the DuPont H-Bomb plant near Aiken, has accepted an appointment as a physician at Whitten Village.

Dr. Bryson, who was graduated in 1943 from the Medical College of South Carolina has been in private practice after an extensive internship period and post-graduate work. He began his duties at Whitten Village early in December.

At the notable Marlboro County Annual Meeting on January 12, the Pee Dee Medical Association presented Dr. Kenneth M. Lynch, President of the Medical College of South Carolina, with a silver tray inscribed as follows:

DR. KENNETH M. LYNCH
With Grateful Acknowledgment For His
Contribution To Medical Progress In
South Carolina
THE PEE DEE MEDICAL ASSOCIATION
January 1956

In presenting this gift, Dr. Joseph P. Cain, representing the Pee Dee Medical Association, reviewed Dr. Lynch's career at the Medical College in complimentary phrases. In acknowledging the gift and in response to Dr. Cain's remarks, Dr. Lynch expressed his deep appreciation for the personal friendship of his colleagues in the Association and attributed the acknowledgment given to him as continued evidence of their loyalty to and support of the progressive development with which he is connected at the Medical College of South Carolina.

ANNOUNCEMENTS

Dr. Henry H. Plowden announces the opening of The Physician's Clinical Laboratory, 1422 Gregg Street, Columbia, S. C. for a complete pathological and clinical pathological service to physicians and hospitals of this area.

Personal Counseling Workshop in the Care of the Alcoholic.
January 23-25, 1956
at the
Greensboro Y. W. C. A. — 314 N. Davie Street

The Mid-Atlantic Section of the International College of Surgeons is holding a regional meeting at the Greenbrier Hotel, White Sulphur Springs, West Virginia, February 13-14-15.

Eighth Annual Scientific Assembly of the American Academy of General Practice
March 19-22, Washington, D. C.
Laboratory Aids in Diagnosis of Fevers—Ivan Bennett, M. D.

Urologic Obstructive Lesions in the Young Male—Hugh J. Jewett, M. D.

Management of Patients with Disabling Diseases. (Live Clinic)—Josephine Buchanan, M. D.

Therapy of External Ocular Diseases—Irwin H. Leopold, M. D.

Urology in the Elderly Female—Lee Turlington, M. D.

Primary Wound Repair—Neal Owens, M. D.

Tumors and Swellings of the Neck—Grant E. Ward, M. D.

Visual Evidence of Vulvovaginal Diseases—Joseph A. Hepp, M. D. (Vulvar Diseases) Newlin F. Paxson, M. D. (Vaginal Diseases) Francis T. Hodges, M. D. Commentator

Thrombocytopenia—Its Causes and Treatment— William Harrington, M. D.

A Look at Tomorrow's Medicine—Francis C. Wood, M. D.

Disturbances and Distortions of Demeanor (Panel)—George Raines, M. D., Moderator, Mabel Ross, M. D., Robert H. Felix, M. D., Manfred S. Guttmacher, M. D.

Diagnosis and Treatment of Curable Heart Disease. (Live Clinic)—W. Proctor Harvey, M. D., Moderator

(With demonstration team from Georgetown University)

OB Symposium.

1. Preparation for Pregnancy—Robert H. Barter, M. D.
2. Protecting the Pregnancy—Paul A. Bowers, M. D.
3. Preserving the Perineum—D. Frank Kaltrider, M. D.

Medicine and Religion—Rev. Das Kelley Barnett

Atherosclerosis—Is It Reversible?—Fred Stare, M. D.

Intestinal Parasites—Ryle A. Radke, M. D.

The Changing Pattern of Disease—Leonard Scheele, M. D.

Cardiac Emergencies—Eugene Stead, M. D.

Contributions of Veterinary Medicine to Human Medicine—Henrik J. Stafseth, Ph. D.

The 1956 meeting of the American Goiter Association will be held in the Drake Hotel, Chicago, Illinois, May 3, 4, and 5, 1956.

HARVARD UNIVERSITY
School of Public Health
announces
PUBLIC HEALTH SCHOLARSHIPS

Scholarships for the Academic Year 1956-57 will be granted to individuals of high professional promise in awards ranging from part tuition to tuition plus a stipend, according to the qualifications and financial needs of the applicants. The Scholarship Funds are limited and are primarily intended for citizens of the United States. In general, preference will be given to applicants under 35 years of age.

A Catalogue of the School, Admission and Scholarship applications, and further information may be obtained by writing the Secretary, Harvard School of Public Health, 55 Shattuck Street, Boston 15, Massachusetts.

Scholarship applicants must return completed admission and scholarship applications to the Harvard School of Public Health by *March 1, 1956.*

Graduate Instructional Course and the Twelfth Annual Meeting of The American College of Allergists at Hotel New Yorker, New York City.

April 15, 16, 17, 1956—Graduate Instructional Course.

April 18, 19, 20, 1956—Twelfth Annual Meeting.

THE PREMATURE INFANT
A Seminar
Date: February 16, 1956

I. Afternoon Session—3:00-5:00 p. m.

St. John's Episcopal Church Parish, 248 S. Dargan Street, Florence, S. C.

Nursing Care of the Premature Infant in the Home and in the Hospital

Participants:

Miss Myra S. Driver, R. N., Consultant Nurse South Carolina State Board of Health.

Mrs. Pearl Hinnant, R. N., Supervising Nurse Richland County Health Department.

Mrs. Anna Chunn, R. N., Supervising Nurse, Premature Nursery, Columbia Hospital.

Mrs. Helen Manor, R. N., Roper Hospital, Charleston.

Retrolental fibroplasia

Howard Stokes, M. D., Florence.

Hyaline Membrane and other remarks

W. M. Hart, M. D., Florence.

Discussion

II. Dinner—7:30 p. m.—Tobaccoland Hotel, Dillon, S. C.

The nurses are invited to have dinner (dutch) with members of the Pee Dee Medical Association. Please notify E. Bryan Michaux, M. D., Dillon, S. C., not later than February 10 if you plan to come to dinner.

III. Evening Session—*Obstetrical Aspects of Prematurity*

John R. Sosnowski, M. D., Charleston, S. C.

Pediatric Aspects of Prematurity

William Gamble, M. D., Charleston, S. C.

Discussion

Institutional, public health, and private duty nurses in the Pee Dee area are invited.

Sponsored by:

Pee Dee Medical Association.

The Committee on Infant Mortality of the S. C. Medical Association.

The Maternal and Child Health Division, S. C. State Board of Health.
February 20, 1956.

The South Carolina Heart Association will hold its annual scientific meeting in Columbia on 13 February, 1956. The sessions, beginning at 9:00 A. M. and running through to 5:15 P. M., will be held in Russell House at the University of South Carolina. The evening sessions will be held in conjunction with the Columbia Medical Society at the Columbia Hotel, beginning at 7:00 P. M.

For the information of those interested, lunch will be made available in the cafeteria of the Russell House. Anyone can be reached by phone during the meeting by calling 2-5641, Ext. 449.

PROGRAM SOUTH CAROLINA HEART ASSOCIATION

Monday, February 13, 1956

9:00—Registration and Call To Order.

9:20—"Factors Governing The Detection of Cardiac Murmurs"—Dr. Dale Groom, Medical College, Charleston, S. C.

9:40—"Diagnosis and Treatment of Acute Rheumatic Fever"—Dr. Lewis W. Wannamaker, The Rockefeller Institute, New York City.

10:15—"Accomplishments and Possibilities of Cardiovascular Surgery"—Dr. Henry T. Bahnson, Johns Hopkins Medical School, Baltimore, Md.

11:10—Intermission

11:30—CLINICAL PATHOLOGICAL CONFERENCE—Dr. Benjamin Baker, Johns Hopkins Hospital, Baltimore, and Dr. Edward S. Cardwell, Columbia, S. C.

12:30—Meeting of Voting Members of South Carolina Heart Association.
Report of Activities of the Association—Dr. John Boone, Chairman, Board of Directors, South Carolina Heart Association, Charleston.
Election of Board of Directors.

1:00—Luncheon Recess.

2:30—"Surgery of the Aorta"—Dr. Henry T. Bahnson.

3:15—"Cardiac By-Pass by Means of Pump-Bubble Oxygenator"—Dr. Edward F. Parker, Associate Professor of Surgery, Medical College, Charleston, S. C.

3:45—"Prevention of Acute Rheumatic Fever and Nephritis"—Dr. Wannamaker.

4:30—"The Management of Hypertension"—Dr. Edgar A. Hines, Jr., The Mayo Clinic, Rochester, Minn.

5:15—Recess.

7:00—Reception and Dinner—Columbia Medical Society—Columbia Hotel.

8:15—"Certain Aspects of Coronary Artery Disease"—Dr. Benjamin Baker.

9:00—"Peripheral Vascular Disease"—Dr. Edgar Hines.

DEATHS

DR. WILLIAM H. PRICE

Dr. William H. Price, the man who was a doctor at 27, a soldier at 33, a beginning pilot at 50, died at 72.

A failing heart in a spirit that never failed took the life of the "flying doctor."

Although he was physically disqualified from the armed forces as early as 1940 because of a heart condition, he termed himself then "fit as any man" and it was not until last January he became seriously disabled.

Hospitalized for several months at that time, he recovered sufficiently to return to his home, but became once again seriously disabled some three months ago and had been practically bedfast for several weeks prior to his death.

Dr. Price crowded four careers—physician, soldier, public servant and aviation enthusiast—into a lifetime that began Sept. 9, 1883, on a plantation near Florence.

A son of Eben and Harriet Coleman Price, he was educated at The Citadel, West Point and the Medical College of South Carolina.

His career as a physician began when he entered private practice in 1910, went hand-in-hand with a career as a public servant as he put in duty as assistant city bacteriologist followed by 24 years' service in the Health Department.

As a soldier, he saw service with the Charleston Light Dragoons of the S. C. Cavalry, National Guard, in 1916 at the Mexican border. He was with the Medical Corps of the Army in World War I and served as assistant regimental surgeon of the 118th Infantry, National Guard, from the close of that engagement until the outbreak of the second world war.

Following a period of active service in World War II, he was physically discharged but continued volunteer military service as an examiner until his last illness.

His career as an aviation enthusiast began, by his own declaration, on December 17, 1903, when the Wright Brothers inagurated "the fad." A Citadel cadet then, he was ridiculed by classmates for announcing he, too, one day would fly.

But, despite his doubting fellows, he did get around to that too—at age 50—and was to establish a reputation as South Carolina's "flying doctor."

At 71, Dr. Price was still flying fervently and frequently and had become a legend among private plane owners.

For his activities in the Breakfast Club, which he headed for seven years, and for his contributions to aviation in general, he was just four months ago presented a certificate from the S. C. Aeronautics Com-

mission. Signed by Gov. Timmerman and Charles Culbertson, commission director, the certificate and a plaque were awarded at a special meeting.

DR. JAMES WILLIAM HAYNIE

Dr. James William Haynie, 52, died at his home in Belton, following a period of illness extending over the last two years.

Dr. Haynie was born February 17, 1903, in Belton, the son of the late Dr. W. R. Haynie and Mrs. Eunice Todd Haynie, both of prominent Belton and Due West families.

Dr. Haynie was educated in the Belton Schools and received his academic training at Furman University, a graduate of the class of 1923. He received his medical training and degree from Vanderbilt University in 1927. He had since practiced medicine in Honea Path and Belton.

He was a member of the First Baptist Church of Belton and of the Marshall Sunday School Class of that church. He was also a member of the Anderson County Medical Society and was interested in many civic activities in Belton.

DR. LAWRENCE MANNING HOOK

Dr. Lawrence Manning Hook, 84, retired physician, died January 17, 1956 after an illness of several years.

He practiced medicine at nearby Eastover 56 years before he retired in 1950.

DR. FRED L. WEBB

Dr. Fred L. Webb, 63, Clinton physician, died suddenly at his home January 10, 1956.

Dr. Webb was chief medical officer and assistant superintendent of Whitten Village, state-supported institution for mentally retarded children. A native of Georgia, Dr. Webb had lived in Clinton 25 years. During this entire period he was associated with Whitten Village.

DR. SAMUEL ALSTON MORRALL

Dr. Samuel Alston Morrall of Graniteville died December 15, 1955 at an Aiken infirmary after an extended illness.

Doctor Morrall was born in Milletville, the son of the late Dr. George W. and Sallie Dunbar Morrall. He was graduated from the Medical College of South Carolina, and was a practicing physician in Trenton for a number of years before coming to Graniteville 35 years ago. He was a member of the Aiken County Medical Association, the American Medical Association, a Shriner, member of the Knights of Pythias Lodge No. 20, a member of Star Lodge 99 A.F.M., and a member of the Graniteville First Baptist Church.

DR. MARTIN CROOK

Dr. Martin Crook, eye, ear and nose specialist for many years, died in an Augusta, Ga., hospital December 21, 1955.

Dr. Crook had been ill for about six months.

DR. THOMAS A. MURRAH, III

Dr. Thomas A. Murrah, III, Rock Hill x-ray specialist, was killed when his station wagon was struck by a speeding automobile on December 22, 1955.

Dr. Murrah came to Rock Hill about 5 years ago to open his practice, specializing in radiology and x-ray work. A native of Union, he graduated from the College of Charleston and the Medical College of South Carolina. Dr. Murrah served his internship at Charlotte Memorial Hospital.

BOOK REVIEWS

TEXTBOOK OF ENDOCRINOLOGY. By Robert H. Williams. Second edition. 776 pages with 173 illustrations. W. B. Saunders Co., Philadelphia, 1955.

The author's purpose in revising this book is to present the most up-to-date information concerning the diagnosis and treatment of endocrine disorders and the use of hormone therapy in non-endocrine disorders. For the sake of conciseness, controversial issues are allotted a minor place—a real boon to the medical student.

Among the contributing authors are such well recognized authorities in their particular fields as George Thorn, Edward Reifenstein, and Lawson Wilkins.

Entire chapters have been re-written in the light of current knowledge, and completely new chapters have been added. The final chapter, dealing with the diagnosis and treatment of endocrinopathies, is unique for its simplicity and practical approach. The author deliberately warns the reader against over-enthusiasm in applying an endocrinological etiology to too many disorders, and against indiscriminate hormone therapy.

For those who wish to explore the minutiae of endocrinology, this book may prove inadequate. But for the medical student it is unsurpassed as a teaching textbook, and for the average physician it provides an up-to-date, concise storehouse of information.

J. R. Sosnowski, M. D.

PATHOLOGY FOR THE SURGEON. By William Boyd, M. D. Seventh Edition, 737 pages with 547 illustrations. W. B. Saunders Co., Philadelphia—Price $12.50.

This book is the author's previous "Surgical Pathology" renamed and rewritten to a considerable degree.

The fundamental purpose of the text is contained in the title. It is designed for the surgeon and is built on the author's firm conviction that without a firm foundation in pathology the surgeon or any other physician cannot achieve greatness. Dr. Boyd is the Duncan Hines of medical literature; to peruse his

writing is an adventure in good reading. Anyone who enjoys writing in the medical sphere that is stimulating, interesting and informative will be pleased with his latest effort. The author has the ability to combine historical anecdote, philosophical sally, literary skill, wit and scientific fact. The result is a charming style with enough literary yeast to keep dry scientific fact constantly effervescing.

The format is attractive with clear print. The references are up to date, pertinent and nicely correlated with the preceding subject matter. This is a thoroughly good book.

H. R. Pratt-Thomas, M. D.

DISEASES OF THE SKIN, by George Clinton Andrews. W. B. Saunders Co., Philadelphia and London—New (4th) Edition 1954—877 pages with 777 illustrations. Price $13.00.

This standard dermatology text in its 4th edition has been revised and brought up to date. The major changes include reclassification of various diseases, especially tumors. Greater emphasis has been placed on the histopathology of the skin in various diseases. The selected reference groupings at the end of each chapter have been increased. All of these are definite improvement over previous editions. However, there is still little attempt to evaluate methods of therapy presented for specific diseases.

This book is an excellent one for the student or practitioner who wants a text that is a good compromise between the small manual-type and the large encyclopedia-type text.

Kathleen Riley, M. D.

THIS PACE IS NOT KILLING US—J. I. Rodale. Rodale Books, Inc., Emmaus, Penn. 1954. Price $1.00.

The author believes from his reading and from his own experience that we, the people, are going too slow, not too fast, that heart disease develops as a result of inactivity and food deficiencies, and that such disease may be relieved enormously by exercise and vitamin E.

J. I. W.

SCISSORISMS

When you come into a House, be always in Haste, feel the Pulse and look grave: Then ask, "Was he feverish?" If they say he was, answer: "I thought as much." Next, "Did the Fit last long?" If they say it did, tell them, "It plainly appears." Write half a score Receipts, that the Apothecary may sell his Trash, and be your Friend, and that the Patient may be sicker. If this does not do, bleed him, then blister him from Head to Foot: If he dies not presently, repeat it till he does, and then tell them his Hour was come; it was a malignant Distemper; there is no opposing the Will of God; you have done all that Art could devise; and the Heir will take it all for granted, and allow you double Fees.

If by Chance the Patient recovers, let him know his Case was desperate, but that you had a *Nostrum* which saved his Life; that it has cost you many Years Study; that it is a most Sovereign Remedy, and little of it to be had. If you happen to cast the Water, be sure to shake it well, look into it narrowly, make Faces, and shake your Head at it. Then, tho' the Patient be only troubled with Chilblains, bid him make his Peace with God, and settle his Affairs, so you gain Reputation if he lives, and are thought to have foretold it if you kill him.

To gain the Credit of being employ'd by great Men, make always some Excuse to stop at their Doors, and go in, tho' it be but to ask an impertinent Question. Get some of your trusty Friends to call you up late at Night, crying out in the Street, that all the Neighbourhood may hear, "Sir, the Duke has sent for you in all Haste. Quickly, Sir my Lady Marchioness is like to die. Make haste, Sir, the Bishop is fallen into a Fit."

Thus will you gain Esteem, become a Doctor of Fame, and have Power of Life and Death over all that believe you."

Don Francisco de Quevedo y Villegas (1580-1645)

ON THE TRAIL OF THE PIONEER

From 1861, when disease took a greater toll of life on Civil War battlefields than minnie balls, to the conflict in Korea, where helicopters carried blood and plasma to the front lines, the American volunteer has followed the example of his pioneer forefathers by helping his neighbors in distress.

Twenty years before the actual organization of the American Red Cross, Clara Barton and hundreds of women volunteers were doing their best to raise the level of medical service for soldiers during the War Between the States.

Time and again the Red Cross has forged ahead with practical training to benefit the health and safety of mankind. Its first aid and water safety courses are in the forefront with the newest, tested methods; its home nursing and baby care classes are recommended by physicians and nurses, many of whom volunteer time for instruction; its disaster relief methods provide practical channels for sympathetic action.

Red Cross bloodmobiles now travel the nation, some near western trails that once were red with the lost blood of our pioneers. One of the most recent developments in the Red Cross

program of service, blood donor recruitment set a remarkable record during World War II in providing blood and its derivatives to wounded soldiers — a record that is being matched by the steady procurement of donors for peacetime illness and accident.

As we move into the atomic age, the Red Cross continues to keep abreast of the times. All the skills and experience of Red Cross volunteers are ready to help those in distress in the event of an atomic disaster.

Seventy-five years of service speak for themselves. Help the Red Cross to stay on the job serving our neighbors everywhere in the proud tradition of our pioneers.

The Physician's Writing and Reading, by H. E. SIGERIST in *Internat. Rec. of Med & G. P. Clinics,* Oct. 1955.

This brings me now to the doctor's reading. I know well enough that his time is limited but he should be the more critical in the selection of his reading. I think everybody, no matter how busy he is should spend at least two hours a day reading.

What should the physician read apart from professional literature that he must read to keep abreast of a fast developing science? Before we answer the question we must raise another one. To what end do we read? I think the answer is: to learn, to improve ourselves, to enrich our life and make it more meaningful, and also to learn to express ourselves better. We do not read to kill time, because life is too short and time too precious to be killed thoughtlessly. There are moments, to be sure that we would have preferred not to have lived, an unpleasant illness or a tedious journey. These are the moments when there is time for a thriller which makes us forget ourselves, our environment, and everything, but I confess that I never developed a taste for them unless they had real literary value.

What then should the physician read? Quite generally I may say, he should read what other educated people read. There are no belleslettres for physicians and others for bankers. I think it is a very good habit to begin the day with a poem. Most busy people, and physicians are busy people, wake up in the morning when the alarm clock rings, without being quite rested. Or they have taken a tablet in order to sleep, have slept deeply but still do not feel quite normal. When they shave they remember what a heavy schedule they have ahead of them and wonder how they will survive the day. When they come down to breakfast they already feel gloomy. They open the paper and read that everybody hates everybody else. In this state of mind they go to the office and the day's drudgery begins. Why not set the alarm clock 10 minutes earlier and before getting up read a poem or two? It will resound in you through the day and may change your entire outlook. This morning I happened to have Dante Gabriel Rossetti's poems on my table.

After I had read the poem I knew that the day was going to be a good one and indeed I wrote more than five pages without inhibitions and whenever something seemed to go wrong I saw the blessed damozel with her lilies and stars, "she bowed herself and stooped Out of the circling charm; Until her bosom must have made The bar she leaned on warm. . ."

An Editor's Prejudices, by H. CLEGG in *Internat. Rec. of Med. & G. P. Clinics,* Oct. 1955.

The doctor who sits down at his desk to compose an article must, I think, be assailed by horrible doubts and fears. As a novice he tends to think that some rather unusual qualities are called for in this mode of expression. He sees his paper as something that may one day appear in the "literature" on the subject. That awful word literature! He becomes most self-conscious of himself as a writer of "Prose", spelt with a capital "P." Too often he thinks that good prose consists of long words strung together in long sentences. He writes: "It is my carefully considered opinion that," instead of "I consider" or "I believe," "All the available accumulated evidence goes to demonstrate that. . . .", instead of "The evidence suggests. ." And the author can give the evidence in his references. Then there is medical jargon. "The patient had no pathology." One might as well say "The patient had plenty of physiology." "He was a strangulated hernia." "She was a carcinoma breast." Such things are said in the wards of hospitals, and are a convenience to the user. Every profession and trade has its own forms of expression, but doctors seem reluctant to distinguish between the spoken and the written language. At least this is partly the explanation. In these days of television, the cinema, the radio, and the illustrated magazine, reading and writing are at a discount. He who runs may read, it has been said. And he who reads may write, and how he writes will depend much upon what he reads. The doctor today has to read so many journals to keep up to date that he has little time left to cultivate the garden of his mind, which in consequence becomes cluttered up with verbal weeds.

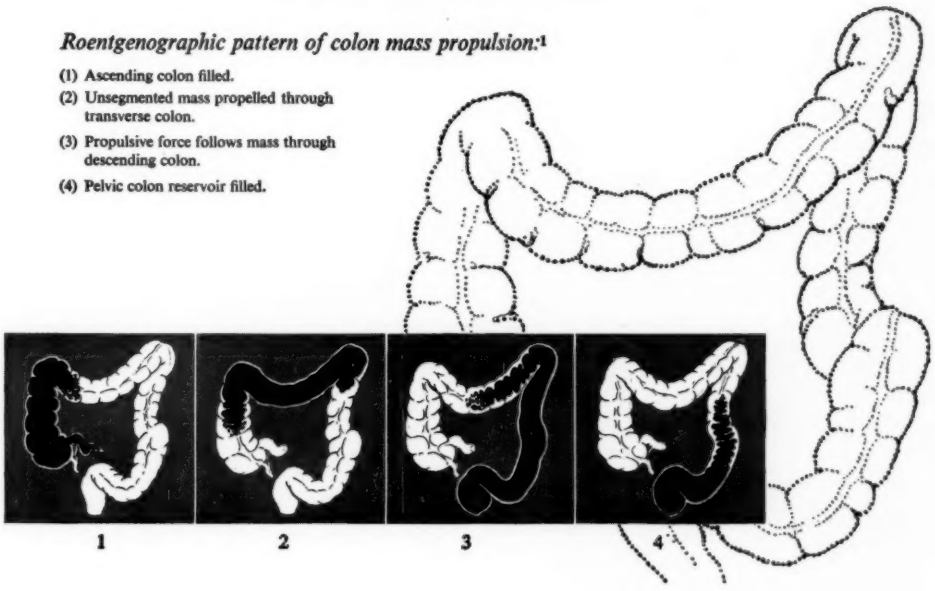
UNCLE WILFRED

Uncle Wilfred has invented a new cigarette holder which, though it has not yet received the endorsement of Alton Ochsner, promises to be a tremendous success. It includes a removable chamber through which the smoke passes on its way from the cigarette to the smoker's lungs. In the chamber he places a mouse. When the mouse develops cancer he takes it out, throws it away, and puts in a new one.

SMOOTHAGE ACTION IN CONSTIPATION

Roentgenographic pattern of colon mass propulsion:[1]

(1) Ascending colon filled.
(2) Unsegmented mass propelled through transverse colon.
(3) Propulsive force follows mass through descending colon.
(4) Pelvic colon reservoir filled.



Reestablishing Bowel Reflexes with Metamucil®

Nervous fatigue, tension, injudicious diet, failure to establish regularity, too little exercise, excessive use of cathartics—all factors which contribute to constipation.[2]

Sufficient bulk and sufficient fluid form the basic rationale of treatment of constipation. Metamucil (the mucilloid of Plantago ovata) produces a bland, smooth bulk when mixed with the intestinal contents. This bulk, through its mass alone, stimulates the peristaltic reflex and thus initiates the desire to evacuate, even in patients in whom postoperative hesitancy exists.

Correction of constipation logically, therefore, lies in the suitable adjustment of such factors as nervous fatigue and tension, improper intake of fluid, improper dietary habits, failure to respond to the call to stool, lack of physical exercise and abuse of the intestinal tract through excessive use of laxatives.[2]

The characteristics of Metamucil permit the correction of most of these factors: it provides bulk; it demands adequate intake of fluids (one glass with Metamucil powder, one glass after each dose); it increases the physiologic demand to evacuate; and it does not establish a laxative "habit." Metamucil, in addition, is inert, and also nonirritating and nonallergenic.

The average adult dose is one rounded teaspoonful of Metamucil powder in a glass of cool water, milk or fruit juice, followed by an additional glass of fluid if indicated.

Metamucil is the highly refined mucilloid of Plantago ovata (50%), a seed of the psyllium group, combined with dextrose (50%) as a dispersing agent. It is supplied in containers of one pound—also four ounces and eight ounces. G. D. Searle & Co., Research in the Service of Medicine.

---

1. Best, C. H., and Taylor, N.B.: The Physiological Basis of Medical Practice: A Text in Applied Physiology, ed. 5, Baltimore, The Williams & Wilkins Company, 1950, pp. 579-583.
2. Bargen, J. A.: A Method of Improving Function of the Bowel, Gastroenterology *13*:275 (Oct.) 1949.

SEARLE

WOMAN'S AUXILIARY
SOUTH CAROLINA MEDICAL ASSOCIATION

President: Mrs. C. R. May, Jr., Bennettsville, S. C. **Publicity Secretary: Mrs. N. D. Ellis, Florence, S. C.**

CONVENTION—WHAT IS IT?

Mrs. Charles R. May, Jr., President

CONVENTION—is the time in which the year's work passes in review as presented by Officers, Committee Chairmen, and County Presidents.

CONVENTION—is the time in which new plans for the future growth of the Auxiliary are formulated.

CONVENTION—is the time in which we increase our knowledge of how to best serve the South Carolina Medical Association, as well as each other!

CONVENTION—is a time of inspiration: when we listen to the splendid accomplishments of County Auxiliaries and meet women who are capable, energetic, and dynamic as well as dedicated to a life of service.

CONVENTION—is a time to renew old friendships and to make wonderfully new ones.

CONVENTION—is the time for fellowship and the sharing of ideas, problems, and solutions.

CONVENTION—is the time to realize the opportunities for service to our communities, families and humanity as offered by the program of the Woman's Auxiliary to the South Carolina Medical Association and to the American Medical Association.

CONVENTION TIME IS—May 15, 16, and 17, 1956, Ocean Forest Hotel, Myrtle Beach, S. C. Bring your husband and children—we'll be looking for YOU!.!

She still needs
YOUR HELP

Join the
MARCH OF DIMES
January 3 to 31

Pauling estimated a few years ago that there are about 100,000 different kinds of proteins in the human body. In defining their varied specific effects on biological activity, only beginnings have been made, for instance, in defining the influence of their fine structure on their immunological activity. Although various proteins have been separated in relatively pure form from their protoplasmic *milieu* and have been analyzed by chemical methods, the synthesis of proteins outside the living cell remains a persistent challenge. Though the chemist is able to break them down, he is, so far as their synthesis is concerned, in the position of a skilled mechanic who is confronted with the task of reconstructing an airplane from its wreckage, but whose previous acquaintance with airplanes consists merely in having seen them momentarily in trackless flight against the sky.

ESTES SURGICAL

SUPPLY COMPANY

Phone WAlnut 1700-1701

56 Auburn Avenue

ATLANTA, GA.